

DOCUMENT RESUME

ED 105 230

CE 003 523

TITLE Optometric Manpower: Characteristics of Optometric Practice, United States--1968. Vital and Health Statistics, Series 14, No. 13.

INSTITUTION National Center for Health Statistics (DHEW), Rockville, Md.

REPORT NO DHEW-HRA-74-1808

PUB DATE Jun 74

NOTE 89p.; For related document, see CE 003 465

EDRS PRICE MF-\$0.76 HC-\$4.43 PLUS POSTAGE

DESCRIPTORS Demography; Employment Statistics; *Health Personnel; Health Services; *National Surveys; *Optometrists; Statistical Data; *Tables (Data)

ABSTRACT

The report is the second describing the findings of a national survey of manpower in the eye care occupations in 1968 and 1969. It contains primarily 27 statistical tables dealing with specific features of the optometric practice: the number and percentage distribution of optometrists by the number of patient visits per week (tables 1-3); the number of patients seen per week (tables 4-6), and the number of supplementary personnel of all types used to assist optometrists in practice (tables 7-27). Tables A through D and other charts illustrate the data taken from the survey on general demographic and professional characteristics of optometrists; characteristics of optometric practice (primary and secondary activities, patient services, and volume of patient-care activity); and the utilization of supplementary personnel (secretaries, receptionists, general optometric assistants, optometric technicians, dispensing opticians, contact lens technicians, and optical technicians). Comparisons between the practice characteristics of ophthalmologists and optometrists surveyed in 1968 reveal a substantial overlap between services rendered by both and their need for supplementary personnel. The three appendixes provide a description of the methodology used in the survey, definitions of terms, and a facsimile of the questionnaire. (Author/JB)

ED105230

DATA ON NATIONAL HEALTH RESOURCES

Series 14
Number 13

Optometric Manpower: Characteristics of Optometric Practice

United States-1968

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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From information collected in a national survey of optometrists conducted by the National Center for Health Statistics, statistics are presented describing features of optometric practice in the United States in 1968. These features include the form and composition of practice arrangements, primary and secondary activities of the practitioners, the range of services that practitioners provided and the numbers and types of supplementary personnel that the optometrist used to assist him in his practice.

DHEW Publication No. (HRA) 74-1808

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

Health Resources Administration
National Center for Health Statistics
Rockville, Md. June 1974

CE 003 523



Library of Congress Cataloging in Publication Data

Optometric manpower.

(Data on national health resources, ser. 14, no. 13) (DHEW publication no. (HRA) 74-1808)
Supt. of Docs. no.: HE 20.2210: 14/13.

I. Optometrists--United States--Statistics.

I. Phillips, Hazel M., joint author. II. Title. III. Series: United States. National Center for Health Statistics. Vital and health statistics. Series 14: Data on national health resources: manpower and facilities, no. 13. IV. Series: United States. Dept. of Health, Education, and Welfare. DHEW publication no. (HRA) 74-1808. [DNLM: 1. Optometry--Manpower--U.S. W2A N148uv no. 13 1974]

RE942.K6 331.1'26 74-2154

ISBN 0-8406-0005-4

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Vital and Health Statistics-Series 14. No. 13

DHEW Publication No. (HRA) 74-1808

Library of Congress Catalog Card Number 74-2154

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SYMBOLS

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OPTOMETRIC MANPOWER: CHARACTERISTICS OF OPTOMETRIC PRACTICE

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INTRODUCTION

This is the sixth in a series of reports from the findings of a national survey of manpower in the eye-care occupations in 1968 and 1969. The survey, conducted by the National Center for Health Statistics with the active assistance of the Bureau of the Census, had as its goal to elicit information about ophthalmologists, optometrists, and opticians and about the supplementary personnel who assisted these primary functionaries in the provision of eye-care services. The five previously published reports based on the survey findings are:

Opticians Employed in Health Services. *Vital and Health Statistics*, DHEW Publication No. (HSM) 72-1025, Series 14 - No. 3, June 1972

Ophthalmology Manpower: A General Profile. *Vital and Health Statistics*, DHEW Publication No. (HSM) 73-1800, Series 14 - No. 5, December 1972

Ophthalmology Manpower: Characteristics of Clinical Practice. *Vital and Health Statistics*, DHEW Publication No. (HSM) 73-1802, Series 14 - No. 7, March 1973

Optometrists Employed in Health Services. *Vital and Health Statistics*, DHEW Publication No. (HSM) 73-1803, Series 14 - No. 8, March 1973

Ophthalmology Manpower: Utilization of Supplementary Personnel. *Vital and Health Sta-*

tistics, DHEW Publication No. (HSM) 73-1804, Series 14, No. 9, May 1973

The present report is the second report which describes personnel who provided optometric services in this Nation in 1968. A previous report on optometric manpower outlined the general demographic and professional characteristics of optometrists who were active and inactive in their profession at the time of the survey; selected statistics from this report are presented on pages 2 and 3. The present report, which contains 27 detailed statistical tables, presents statistics on several of the more specific features of optometric practice. These features include the form and composition of practice arrangements, primary and secondary activities of the optometric practitioner, and the range of optometric services that the practitioner provided. A substantial portion of the report is devoted to the numbers and types of supplementary personnel that the optometrist used to assist him in his practice. The 27 detailed tables that are found in this report are optometrists by number of patient visits per week (tables 1-3), number of patients seen per week (tables 4-6), number of supplementary personnel of all types used to assist the optometrist in practice, such as secretaries and/or receptionists, general optometric assistants, optometric technicians, dispensing opticians, contact lens technicians, and optical technicians (tables 7-27).

Statistics used in the two reports on optometric manpower reflect the application of a statistical adjustment designed to compensate for total or partial nonresponse to the survey question-

naire. The adjustment yielded an estimate of 18,427 for the number of optometrists active in their profession at the time of the 1968 survey; this figure supplied the statistical base for most of the tables and textual discussion that appeared in the first report. Very few members of this active universe occupied themselves solely with activities such as teaching, research, or administration—activities which excluded patient care. About 99 percent of the active universe reported that they devoted at least some part of their weekly professional effort to the care of optometric patients. This 99 percent, numbering 18,299 practitioners, make up the report universe for the present report; they are the chief subjects of its tabular data and textual commentary.

In the pages that follow, comparison will sometimes be made between the practice characteristics of optometrists and those of the ophthalmologists surveyed in 1968 (Series 14, No. 7), especially when the two professional groups appear to overlap in the patient services that they offered and in their respective utilizations of the available manpower resource in supplementary eye-care personnel.

The text is supported by the 27 detailed statistical tables and three appendixes. Appendix I explains the methodology that was used in the collection and processing of data obtained from the 1968 survey of optometrists. Appendix II defines certain terms used in the report and Appendix III is a facsimile of the questionnaire used to survey optometrists in 1968.

1968 OPTOMETRISTS IN PERSPECTIVE

General Demographic and Professional Characteristics

The following statistics were selected from the earlier report, *Optometrists Employed in Health Services: United States-1968* (Series 14, Number 8), the first report on optometric manpower from the findings of the 1968 survey.

There were an estimated 20,301 civilian optometrists in the United States in 1968. Of these, 1,873 optometrists, or about 9 percent of the total, were inactive in their profession, 922 by reason of retirement and 951 for other reasons. About 91 percent of the total, 18,427 optometrists, were actively engaged in professional optometric activities, a ratio of 9.3 active optometrists to every 100,000 persons in the general population.

The geographic distribution of optometrists did not always mirror the distribution of the general population, as is revealed in table A. The ratio of optometrists to population was lowest in the South Region although the largest regional proportion of the Nation's population was to be found in the South. The North Central Region was favored over other regions both in the percent of all active optometrists located there and in the fact that it boasted the second highest ratio of optometrists to general population. The West Region had the highest ratio—11.2 optometrists per 100,000 population. For a more localized

Table A. Percent distribution of 1968 civilian population, active optometrists, and rates per 100,000 population, according to geographic region: United States, 1968

Geographic region	1968 civilian population	Active optometrists	Optometrists per 100,000 population
Percent distribution			
United States-----	100.0	100.0	9.3
Northeast-----	24.4	25.8	9.9
North Central-----	28.0	31.9	10.6
South-----	31.0	22.4	6.8
West-----	16.6	19.9	11.2

analysis of optometrist concentration, refer to figure 1 where the ratio of active optometrists to general population is pictured by State.

The median age of all active optometrists was 47.5 years, with about 55 percent of their number located in the age interval 40-54 years. About 98 percent of all active optometrists were male. About 76 percent were licensed in only one State. The typical optometrist reported a working year that exceeded 48 weeks and a working week of roughly 40 hours. A substantial 16 percent of all active optometrists spent fewer than 35 hours per week in optometric activities.

Participation in professional activities other than direct patient care was limited. Only about

2 percent of active optometrists devoted some part of their working time to teaching in schools of optometry; about 6 percent were engaged to some degree in optometric research; and about 12 percent were at least partially active in administrative duties other than those connected with the care of patients, e.g., optometric associations.

More than 99 percent of all active optometrists were engaged to some extent in the direct care of optometric patients. It is these patient-seeing optometrists—18,299 in number—who make up the report universe of the present report and supply the statistical base for most of the tables and textual commentary.

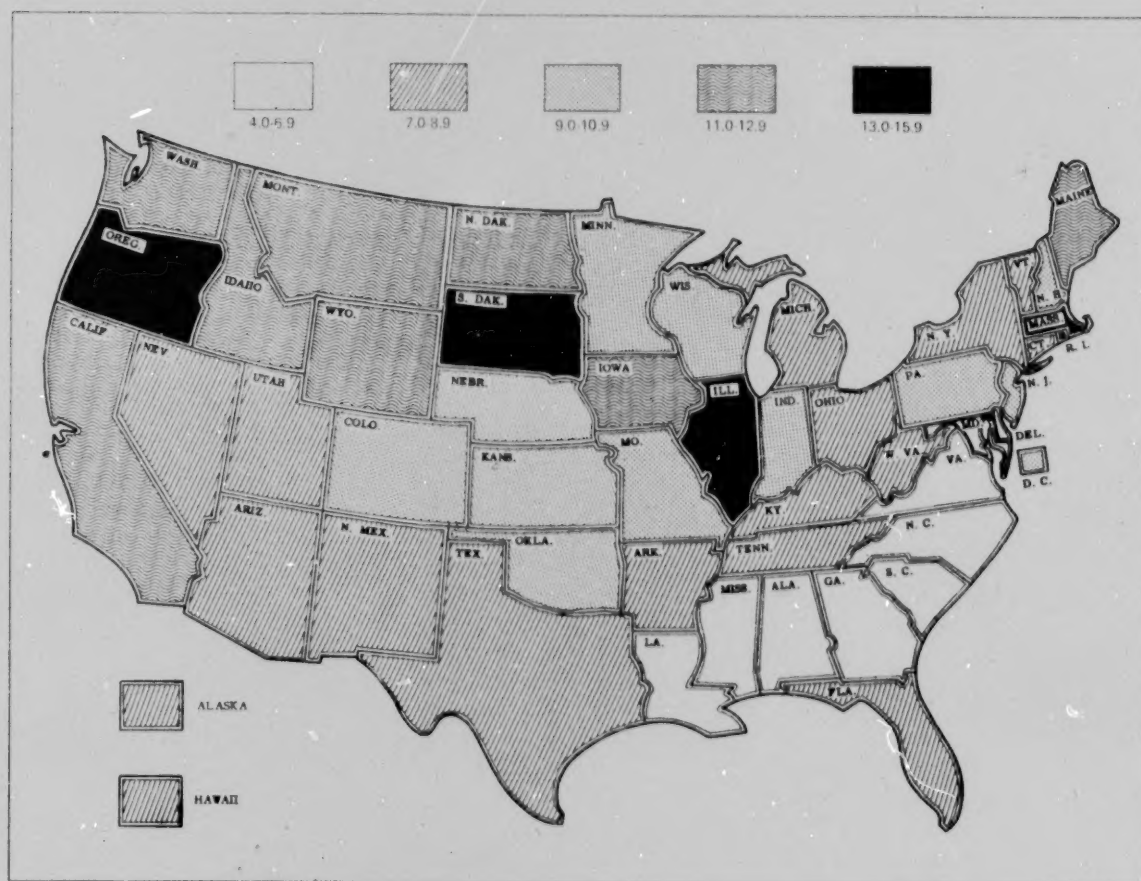


Figure 1. Number of active optometrists per 100,000 population: United States, 1968.

CHARACTERISTICS OF OPTOMETRIC PRACTICE

Form and Composition of Independent Practice Arrangements

Of the 18,299 optometrists comprising this report universe, 16,218, or about 89 percent, were engaged in self-employed practice arrangements as follows:

Form of practice	Number of practi- tioners	Percent of report universe
All arrangements--	16,218	88.6
Solo practice-----	13,510	73.8
Partnership-----	2,178	11.9
Group practice-----	530	2.9

Solo practice was clearly the form of independent practice most favored by respondents. Using medians, the typical solo practitioner was a male Doctor of Optometry between 47 and 48 years of age and licensed to practice in only one State. He maintained only one office, worked more than 48 weeks per year, and devoted roughly 40 hours per week to all his professional activities. About 74 percent of solo practitioners made use of supplementary personnel to assist them in practice.

About 15 percent of the report universe (2,708 optometrists) practiced optometry in multiple-member arrangements. The partnership was the most frequently reported form of multiple-member practice—an estimated 2,178 optometrists (about 12 percent of the report universe) participated in this form of practice—and only about 3 percent of the respondents were to be found in group practice. Again reporting median tendencies, the typical member of a multiple-member practice differed from his colleague in solo practice in certain, perhaps significant, respects; for example, he tended to be about 2 years younger than the solo practitioner and to work at least 2 hours more per working week. There was also a

notably stronger tendency to make use of supplementary eye-care personnel in partnerships and group practice arrangements. About 94 percent of the optometrists in multiple-member forms of practice reported the use of supplementary helpers as compared with 74 percent for solo practitioners.

Survey findings did not permit a direct and complete evaluation of the composition of multiple-member forms of practice. There was evidence, however, that the most utilized form was a two-member practice arrangement in which both members were optometrists. This derives from the finding that of the optometrists who reported sharing supplementary personnel with associates, about 69 percent reported that they shared these personnel with two associates, and of these optometrists who reported sharing personnel with two associates, about 77 percent reported that their associates were fellow optometrists. The number of optometrists in multiple-member forms of practice was more exactly evaluated by responses to the survey question "If in partnership or group practice, how many optometrists are there in the partnership or group (counting yourself)?" To this question, 2,105 respondents reported two optometrists in their multiple-member arrangement; 421 respondents reported three optometrists; and 182 reported four optometrists or more.

Primary and Secondary Activities

An examination of the primary and secondary activities reported by patient-serving optometrists is shown in table B. Clearly, practicing optometrists did not show any marked tendency to specialize since about 97 percent of them engaged in general practice as their primary activity and 13 percent reported no secondary activity at all. Of the secondary activities, contact lens fitting was by far the most favored by respondents. In order of preference the three most popular secondary activities were contact lens fitting, general practice activities, and vision training. The typical practice obviously centered around general practice activities plus some contact lens work with a tendency, not very sharply pronounced, to be engaged in some vision training.

Table B. Primary and secondary activities of optometrists: United States, 1968

Activity	Number engaged in activity	Percent distribution
<u>Primary</u>		
Total-----	18,299	100.0
General practice-----	17,657	96.5
Contact lens fitting-----	368	2.0
Visual training (orthoptics)-----	63	0.3
Developmental vision-----	87	0.5
Prescribing low vision aids-----	6	0.0
Industrial vision-----	29	0.2
Other-----	90	0.5
<u>Secondary</u>		
Total-----	18,299	100.0
No secondary activity-----	2,373	13.0
General practice-----	2,709	14.8
Contact lens fitting-----	10,588	57.9
Visual training (orthoptics)-----	1,104	6.0
Developmental vision-----	483	2.6
Prescribing low vision aids-----	218	1.2
Industrial vision-----	611	3.3
Other-----	213	1.2

Patient Services Rendered

Fourteen specific patient services were listed on the survey questionnaire and respondents were asked to check those rendered by them or under their direction. The 14 services in descending order from the most frequently rendered to the least are ranked in table C. Judging from median tendencies, the typical practitioner rendered at least eight or nine of these services, in most instances the services listed above the dotted line. Services below the line were less commonly provided; substantially fewer than one-half of the Nation's practitioners rendered any one of these six services.

A substantial overlap occurred between services rendered by optometrists and those rendered by the Nation's ophthalmologists during the same reporting period. Examples of overlap

include: 8,282 ophthalmologists engaged in diagnostic examination (including tonometry), 7,802 performed visual field examinations, 4,834 reported the fitting of contact lenses, 4,571 prescribed low-vision aids, 2,710 provided orthoptic training or directed its provision, and 786 reported aniseikonic testing among their activities (Series 14, No. 7).

Volume of Patient-Care Activity

Volume of patient-care activity was directly assessed by two items on the survey questionnaire. Respondents were asked: "In your *optometric practice*, *approximately* how many patient *visits* for all purposes do you have during a typical week?" and further: "*Approximately* how many *patients* does this represent? (Patients with multiple visits should be counted only once)."

Table C. Specific patient services rendered by optometrists: United States, 1968

Type of service	Number providing service	Percent of report universe
Refractions-----	18,238	99.7
Dispensing and adjusting eyewear-----	17,122	93.6
Ophthalmoscopy-----	16,928	92.5
Frame repairs-----	15,532	84.9
Contact lens fitting-----	14,521	79.4
Visual field examination-----	13,780	75.3
Tonometry-----	12,098	66.1
Visual training (orthoptics)-----	9,128	49.9
Prescribing low vision aids-----	7,450	40.7
Fabrication of eyewear-----	6,610	36.1
Biomicroscopy-----	5,907	32.3
Developmental vision-----	5,225	28.6
Visual readiness for reading-----	4,735	25.9
Aniseikonic testing-----	1,528	8.4

Patient visits per week.—The national experience of optometrists in patient visits per week was distributed as follows:

Patient visits per week	Number of practitioners	Percent distribution
Total-----	18,299	100.0
Less than 25 visits--	1,578	8.6
25-49 visits-----	3,762	20.6
50-74 visits-----	4,989	27.3
75-99 visits-----	2,750	15.0
100 visits or more---	5,221	28.5

The national median was 69 visits per week for the typical practitioner. Regional variations from the national median were not very dramatic, as the following distribution by geographic region shows:

Geographic region	Number of active optometrists per 100,000 population	Median visits per week
United States--	9.3	69
Northeast-----	9.9	64
North Central-----	10.6	71
South-----	6.8	73
West-----	11.2	67

It may be meaningful that Southern optometrists, with the smallest concentration in the United States (in terms of number per 100,000 population), reported the highest median in patient visits per week. And Western optometrists, with a concentration per 100,000 population exceeding that of the other regions, reported a median experience in patient visits which was below the

national median. Assuming a need for optometric services which was fairly uniform regardless of geographic area, this might indicate that the typical Southern optometrist was, at least partially, attempting to compensate for his comparative scarcity in that area by extending the volume of his patient-care activity. It is clear, however, that factors other than simple geographic concentration were at work to influence the volume of patient-care activity. Thus optometrists of the North Central Region, with a concentration exceeded only by Western optometrists, still reported a median in patient visits which exceeded the national median and in fact was second only to the median reported by the Southern optometrist.

Figure 2 plots the relationship between patient visits per week and the age of the practitioner. Patient-care activity in terms of visits per week is seen to peak at a median of about 75 visits for optometrists in the age interval from 35 to 44 years and to decrease with each age interval until among optometrists over 65 years the median experience was about 40 visits per week.

With a median experience of about 51 visits per week, female optometrists reported a rate of patient-care activity that was substantially smaller than the 69 visits per week reported by the typical male practitioner.

The tabulation that follows reveals the relationship between patient visits and the form of practice that the optometrist engaged in.

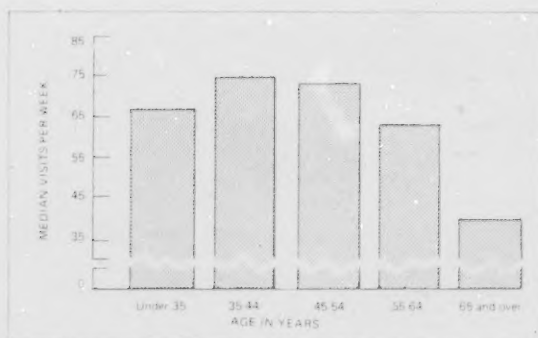


Figure 2. Median patient visits per week according to age of optometric practitioner. United States 1968

Form of Practice	Number of practitioners	Median patient visits per practitioner per week
Solo practice-----	13,510	65
Partnership-----	2,178	87
Group practice-----	530	93

Clearly, within the typical multiple-member practice arrangement, the workload in patient visits was higher than that experienced by the typical solo practitioner. It was further noted that, within the partnership or group practice, the median experience in patient visits increased in positive proportion to the number of optometrists practicing in any particular multiple-member arrangement. For example, where two optometrists were engaged, the median was about 87 visits per week; where three optometrists were involved, the median was 97 visits; and in practice arrangements that involved four or more, the median exceeded 100 visits per week.

However, in the national perspective of optometric care it must be remembered that practitioners in the multiple-member practice forms were in the decided minority, with only 2,178 of them practicing in partnerships and 530 engaged in group practice. It was the estimated 13,510 solo practitioners, constituting about 74 percent of the national manpower resource, who with their median experience of 65 visits per week provided by far the greatest bulk of professional service to optometric patients in the United States at the time of the survey.

A reference to tables 2 and 3 will suggest the positive relationship that prevailed between number of patient visits and the following variables: hours worked per week, number of office locations, number of States licensed in, and number of optometric services rendered by the practitioner. As one increased, so did the other, though not always in a manner that was exactly proportional. For example, an analysis of the number of optometric services rendered yielded the following:

Number of optometric services rendered	Median patient visits per week
1-3 services-----	47
4-6 services-----	64
7-9 services-----	70
10 services or more-----	74

Patients seen per week.—The tendencies noted in the discussion of patient visits per week also apply generally to the number of optometric patients seen per week.

The national experience of optometric patients seen per week was as follows:

Patients seen per week	Number of practitioners	Percent distribution
Total-----	18,299	100.0
Less than 25 patients-----	4,086	22.3
25-49 patients-----	6,886	37.6
50-74 patients-----	3,719	20.3
75-99 patients-----	1,726	9.4
100 patients or more-----	1,881	10.3

The national median was 43 optometric patients seen per week by the typical practitioner. A comparison to the median of 69 patient visits per week roughly suggests the extent to which multiple visits were made by the same patient within a single week. Regional distribution of the median patients seen per week is as follows:

Geographic region	Median patients seen per week	Median patient visits per week
United States---	43	69
Northeast-----	41	64
North Central-----	45	71
South-----	44	73
West-----	43	67

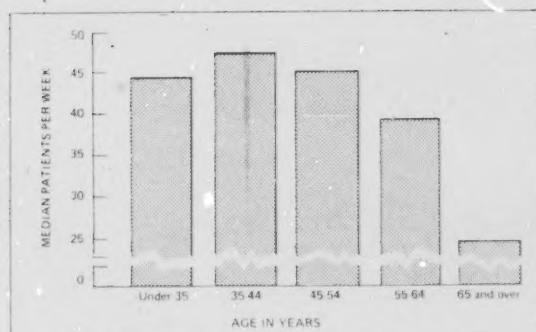


Figure 3. Median patients seen per week according to age of optometric practitioner: United States 1968

Figure 3 plots the relationship between patients seen per week and the age of the practitioner. The median of patients seen per week is seen to peak at about 47 patients for optometrists in the age interval 35-44 years and decrease with advancing age until among optometrists over 65 years the median experience was only about 25 patients per week.

With a median experience of about 34 patients seen per week, female optometrists reported patient-care activity that was substantially smaller than the 44 patients per week reported by the typical male practitioner.

Tabulated below are figures revealing the relationship between patients seen per week and the form of practice that the optometrist engaged in.

Form of practice	Number of practitioners	Median patients seen per week
Solo practice-----	13,510	40
Partnership-----	2,178	55
Group practice-----	530	60

Clearly, within the typical multiple-member practice arrangement the number of patients seen was higher than that experienced by the typical solo practitioner. It was further noted that, within the partnership or group practice, the median in patients seen increased in proportion to the number of optometrists practicing in any par-

ticular multiple-member arrangement. For example, where two optometrists were engaged, the median was about 53 patients per week; where three optometrists were involved, the median was 63 patients; and, in practice arrangements that involved four optometrists or more, the median was 70 patients per week.

However, in the national perspective of optometric care, it must be remembered that practitioners in the multiple-member practice forms were in the decided minority, with only 2,178 of their numbers practicing in partnerships and only 530 engaged in group practice. It was the estimated 13,510 solo practitioners, constituting about 74 percent of the report universe who, with their median experience of 40 patients per week, provided by far the greatest bulk of professional service to optometric patients in the United States at the time of the survey.

A reference to tables 5 and 6 will suggest the positive relationship that prevailed between number of patients seen per week and the following variables: hours worked per week, number of

office locations, number of States licensed in, and number of optometric services rendered by the practitioner. As one increased, so did the other.

UTILIZATION OF SUPPLEMENTARY PERSONNEL

General Characteristics of Users of Auxiliary Personnel

Respondents to the 1968 survey were asked whether or not they used the services of auxiliary personnel to assist them in caring for their optometric patients. A total of 14,339 optometrists (about 78 percent of the report universe) reported that they did; they will hereafter be referred to as "users." About 98 percent of users were male. The median age of users was 46.5 years, 1 year less than the median age of 47.5 reported for the entire universe of active optometrists. Geographically, users were distributed as shown in table D.

Table D. Number of optometrists who utilized supplementary personnel according to geographic area: United States, 1968

Region and division	Number who utilized supplementary personnel	Percent distribution
United States-----	14,339	100.0
Northeast-----	3,106	21.7
New England-----	862	6.0
Middle Atlantic-----	2,244	15.6
North Central-----	4,548	31.7
East North Central-----	3,172	22.1
West North Central-----	1,377	9.6
South-----	3,629	25.3
South Atlantic-----	1,718	12.0
East South Central-----	715	5.0
West South Central-----	1,196	8.3
West-----	3,056	21.3
Mountain-----	603	4.2
Pacific-----	2,453	17.1

The tendency to use supplementary personnel was strongest among optometrists of the South Region, where about 88 percent of the patient-serving optometrists reported the use of assistants. This was well above the 78 percent calculated for the Nation as a whole, and, when one remembers that the concentration of optometrists in the South (6.8 per 100,000 population) was substantially lower than the ratio for any other region in the United States, this rate may suggest that the Southern optometrist was at least partially compensating for his relative scarcity by using assistants in an effort to extend his range of services.

There was a direct relationship between form of practice and the reported usage of supplementary assistants. Whereas about 74 percent of the Nation's solo practitioners relied on supplementary personnel, the figure was 93 percent for optometrists in partnerships and about 96 percent for those engaged in group practice. However, since users in solo practice outnumbered users in the other practice forms by almost 4 to 1, it is clear that most supplementary personnel performed their services for solo practitioners.

The questionnaire requested information on the utilization of six specific types of supplementary assistants. Of the Nation's 14,339 users of auxiliary personnel, about 84 percent utilized the services of secretaries and/or receptionists and 30 percent utilized general optometric assistants (supplementary personnel who spent less than 75 percent of their time in any of the assistant categories were counted as general optometric assistants). Sixteen percent utilized dispensing opticians, 10 percent utilized optical technicians (shopmen), 5 percent utilized optometric technicians, and 4 percent utilized contact lens technicians.

Certain professional characteristics of the user are brought into sharper focus when they are directly contrasted with corresponding characteristics of the 3,960 members of the report universe who reported that they did not utilize supplementary personnel. For example, the typical user reported about 76 visits by eye patients per week; the typical nonuser, about 45. The typical user saw about 48 patients in the course of a week; the typical nonuser saw only about 28.

The following tabulation contrasts the range of professional activity of the user of supplementary personnel and the nonuser by the extent to which each provided 14 selected patient services or directed the provision of these services.

Patient service	Users	Nonusers
	Percent	
Refractions-----	99	99
Visual field examination--	78	65
Tonometry-----	72	43
Aniseikonic testing-----	9	6
Biomicroscopy-----	37	14
Ophthalmoscopy-----	94	86
Contact lens fitting-----	84	61
Visual training (orthoptics)-----	52	42
Developmental vision-----	31	19
Prescribing low vision aids-----	44	29
Visual readiness for reading-----	28	18
Dispensing and adjusting eyeware-----	94	90
Frame repairs-----	86	79
Fabrication of eyeware---	38	21

Note the direct relationship between use of supplementary personnel and the tendency to render any of the services except refractions. For several of the services (e.g., tonometry, biomicroscopy, and fitting contact lenses), the reliance on supplementary assistance is especially evident.

Judging by the number of the 14 services that optometrists provided, without regard for the frequency of rendition or for the time or degree of sophistication involved in the performance of each service, about 78 percent of all users reported that they provided more than seven of the 14 services, as opposed to about 54 percent of all nonusers.

Number of Supplementary Personnel

The typical patient-serving optometrist who used supplementary personnel in the United States in 1968 utilized the services of 2.1 assistants

(a median figure). Variations in numbers of assistants are perhaps more meaningfully expressed by reporting for appropriate demographic and professional categories, the proportion of users who made use of two or more supplementary assistants.

For the Nation as a whole, the proportion of "using" optometrists who utilized two or more assistants was about 54 percent. The following tabulation shows user experience by geographic regions and their component divisions.

Region and division	Percentage of users who use 2 or more assistants
United States-----	54
Northeast-----	49
New England-----	39
Middle Atlantic-----	53
North Central-----	56
East North Central-----	56
West North Central-----	55
South-----	53
South Atlantic-----	52
East South Central-----	49
West South Central-----	58
West-----	56
Mountain-----	53
Pacific-----	57

Thus, though the tendency to use two or more assistants does not show dramatic variations when it is expressed by geographic region, considerable variation may be observed among divisions within a single region as well as among divisions which are geographically remote from one another. For example, note the New England Division of the Northeast Region, where the tendency to use two or more supplementary personnel contrasted sharply with the experience of optometrists in the Middle Atlantic Division. The tendency in New England was, in fact, markedly weaker than anywhere else in the Nation.

The tabulation that follows relates number of assistants to the age of the user.

Age	1 assistant	2 or more assistants
	Percent of total users	
Total users-	46	54
Under 35 years----	40	60
35-44 years-----	43	57
45-54 years-----	47	53
55-64 years-----	53	47
65 years and over-	55	45

Note the inverse relationship that existed between age and the tendency to utilize two or more assistants. At its strongest among younger practitioners, the tendency declined markedly as age categories advanced.

Conditions of Utilization

Users of supplementary personnel were asked to specify the conditions in which they utilized each type of assistant. The following four conditions of utilization were possible:

Full-time unshared, i.e., 35 hours or more per week, services of assistant not shared with associates.

Full-time shared, i.e., 35 hours or more per week, services of assistant shared with associates.

Part-time unshared, i.e., less than 35 hours per week, services of assistant not shared with associates.

Part-time shared, i.e., less than 35 hours per week, services of assistant shared with associates.

The use of one or more assistants of a given type in one of the above four conditions of utilization is treated in this analysis as a "report of utilization." By this measurement of usage, there were a total of 25,487 reports of utilization of supplementary personnel. Of this total, about 58 percent were for secretaries and/or receptionists, 19 percent for general optometric assistants, 10 percent for dispensing opticians, 6 percent for optical technicians (shopmen), 3

percent for optometric technicians, 2 percent for contact lens technicians, and 3 percent were for other types of supplementary personnel (e.g., orthoptists). Members of this "other" category were not reported with sufficient frequency to warrant separate treatment in this report.

An overall analysis of the conditions in which assistants were used showed that, in order of preference, about 70 percent of all reports specified *full-time* utilization, about 30 percent specified *part-time*; 64 percent of all reports specified *unshared* utilization, and 36 percent specified the *sharing* of assistants with associates.

When these two fundamental bases of usage were combined, it was apparent that:

- 43 percent of all reports of utilization specified assistance on a *full-time unshared* basis.
- 27 percent specified assistance on a *full-time shared* basis.
- 22 percent specified assistance on a *part-time unshared* basis.
- 9 percent specified assistance on a *part-time shared* basis.

In the discussion that follows, the basis of utilization will be seen to vary with the specific type of assistant under consideration. The preference was generally for the full-time unshared utilization of secretaries and/or receptionists. General optometric assistants were likewise generally used on a full-time unshared basis. For optometric technicians, dispensing opticians, contact lens technicians, and optical technicians, however, the preference was for full-time shared personnel. Only with the undifferentiated "other" types of assistants did the reports of utilization favor assistance on a part-time basis.

Utilization of Secretaries and/or Receptionists

There were 14,661 reports of utilization of secretaries and/or receptionists. Assistants of this type were distributed according to the following conditions of usage. About 45 percent of the reports of utilization specified utilization on a *full-time unshared* basis, 21 percent specified *full-time shared*, 25 percent specified *part-time unshared*, and 9 percent specified utilization on a *part-time shared* basis. Thus full-time unshared

utilization was the most popular condition of usage and part-time shared utilization the least popular.

Of the 12,044 optometrists who utilized secretaries and/or receptionists, about 66 percent used one; about 23 percent used two; and 11 percent used three or more. When an optometrist reported the use of only one assistant of any type, in almost eight cases out of 10 this assistant was a secretary or receptionist. Of those who reported that they used two assistants of any type, about 85 percent reported that the assistants included at least one secretary or receptionist. And, of those who reported the use of three or more assistants of any type, about 92 percent reported that their assistants included one or more secretaries and/or receptionists.

The following tabulation shows the extent to which the utilization of secretaries and receptionists was reflected in the tendency to render specific patient services.

Patient service	Users Nonusers	
	Percent	
Refractions-----	99	99
Visual field examination-----	78	70
Tonometry-----	72	54
Aniseikonic testing-----	9	7
Biomicroscopy-----	37	23
Ophthalmoscopy-----	94	89
Contact lens fitting-----	84	70
Visual training (orthoptics)-----	51	47
Developmental vision-----	30	26
Prescribing low vision aids-----	44	35
Visual readiness for reading-----	27	24
Dispensing and adjusting eyewear-----	94	92
Frame repairs-----	86	83
Fabrication of eyewear---	38	33

Note that the addition of administrative personnel increased the tendency to perform all patient services except routine refractions. The influence was a general one. It probably operated by freeing the optometrist from the performance of routine clerical and administrative tasks, thus allowing him more time for his strictly clinical functions.

Utilization of General Optometric Assistants

There were 4,832 reports of utilization for general optometric assistants; this included persons who spent less than 75 percent of their time in any of the assistant categories. They were distributed according to the following conditions of usage. About 48 percent of the reports of utilization specified use on a *full-time unshared* basis, 22 percent on a *full-time shared* basis, 23 percent on a *part-time unshared* basis, and 7 percent specified use on a *part-time shared* basis. Thus, as with secretaries and receptionists, full-time unshared utilization was the most popular condition of usage and part-time shared utilization the least popular.

Of the 4,230 optometrists who utilized general optometric assistants, about 71 percent used one, about 20 percent used two, and about 9 percent used three or more. Of these who reported that they used two assistants, about 35 percent reported that the two included at least one general optometric assistant. And, of those who reported the use of three or more assistants of any type, about 45 percent reported that the number included one or more general optometric assistants.

The following tabulation shows the extent to which the utilization of general optometric assistants was reflected in the tendency to render specific patient services.

Patient service	Users	Nonusers
	Percent	
Refractions-----	99	99
Visual field examination-----	83	73
Tonometry-----	80	62
Aniseikonic testing-----	11	8
Biomicroscopy-----	49	27
Ophthalmoscopy-----	96	91
Contact lens fitting-----	89	77
Visual training (orthoptics)-----	61	47
Developmental vision	40	25
Prescribing low vision aids-----	50	38
Visual readiness for reading-----	36	23
Dispensing and adjusting eyeware-----	96	93
Frame repairs-----	89	84
Fabrication of eyeware---	39	35

Note that the addition of general optometric assistants generally increased the tendency to perform all the clinical functions except routine refractions. It was most dramatically manifest in the tendency to perform the diagnostic functions of biomicroscopy and tonometry.

Utilization of Optometric Technicians

There were 707 reports of utilization of optometric technicians. Assistants of this type were distributed according to the following conditions of usage. About 36 percent of the reports of utilization specified utilization on a *full-time unshared* basis, 44 percent specified a *full-time shared* basis, 11 percent specified a *part-time unshared* basis, and 9 percent specified utilization on a *part-time shared* basis. Thus in contrast with the utilization of administrative personnel and general optometric assistants, full-time shared utilization was the most popular condition of usage for optometric technicians although part-time shared utilization remained the least popular.

Of the relatively few optometrists (650) who utilized optometric technicians, about 75 percent used one, about 16 percent used two, and about 10 percent used three or more. Of optometrists who reported using only one assistant of any type, fewer than 1 percent reported that this one assistant was an optometric technician. Of those who reported that they used two assistants, about 4 percent reported that the two included at least one optometric technician. And, of those who reported the use of three or more assistants of any type, about 13 percent reported that the number included one or more optometric technicians.

The following tabulation shows the extent to which the utilization of optometric technicians was reflected in the tendency to render specific patient services. Except for a slightly negative effect on the function of dispensing and adjusting, the addition of optometric technicians generally increased the tendency of optometrists to render all of the clinical functions. Most pronounced was the increased tendency to perform the diagnostic functions of biomicroscopy and aniseikonic testing.

Patient service	Users	Nonusers
	Percent	
Refraction-----	100	99
Visual field examination-	77	75
Tonometry-----	72	66
Aniseikonic testing-----	14	8
Biomicroscopy-----	46	32
Ophthalmoscopy-----	93	92
Contact lens fitting-----	84	79
Visual training (orthoptics)-----	53	50
Developmental vision-----	33	28
Prescribing low vision aids-----	50	40
Visual readiness for reading-----	33	26
Dispensing and adjusting eyeware-----	92	94
Frame repairs-----	84	85
Fabrication of eyeware---	45	36

Utilization of Dispensing Opticians

There were 2,455 reports of utilization of dispensing opticians. They were distributed according to the following conditions of usage. About 37 percent of the reports of utilization specified utilization on a *full-time unshared* basis, 48 percent on a *full-time shared* basis, 8 percent specified *part-time unshared* utilization, and 7 percent specified *part-time shared* utilization. Thus, as with the utilization of optometric technicians, full-time shared utilization was the most popular condition of usage.

Of the 2,231 optometrists who utilized dispensing opticians, about 62 percent used one, about 20 percent used two, and about 18 percent used three or more. Of optometrists who reported using only one assistant of any type, only about 2 percent reported that this one assistant was a dispensing optician. Of those who reported that they used two assistants of any type, again only a small proportion (about 12 percent) reported that the two included at least one dispensing optician. However, among optometrists who reported the use of three or more assistants of any type, a more substantial number, about 44 percent, tended to use one or more dispensing opticians.

The following tabulation shows the extent to which the utilization of dispensing opticians was

reflected in the tendency to render specific patient services.

Patient service	Users	Nonusers
	Percent	
Refractions-----	99	99
Visual field examination-	64	77
Tonometry-----	61	67
Aniseikonic testing-----	8	8
Biomicroscopy-----	33	32
Ophthalmoscopy-----	92	93
Contact lens fitting-----	80	79
Visual training (orthoptics)-----	35	52
Developmental vision-----	21	30
Prescribing low vision aids-----	38	41
Visual readiness for reading-----	19	27
Dispensing and adjusting eyeware-----	89	94
Frame repairs-----	79	86
Fabrication of eyeware---	45	35

Note that the trend recorded for users of administrative personnel, general optometric assistants, and optometric technicians was generally reversed among users of dispensing opticians. That is, optometrists who were assisted by dispensing opticians showed a reduced tendency to perform most patient services other than the fabrication of eyeware. The presence of a dispensing optician appeared to create an increased tendency toward specialization among optometrists who used them.

Utilization of Contact Lens Technicians

There were 539 reports of utilization for contact lens technicians. Assistants of this type were distributed according to the following conditions of usage. About 26 percent of the reports of utilization specified utilization on a *full-time unshared* basis, 49 percent on a *full-time shared* basis, 18 percent specified *part-time unshared* utilization, and 7 percent specified *part-time shared* utilization. Again, as with optometric technicians and dispensing opticians, full-time shared utilization was the preferred condition of usage.

Of the relatively few optometrists (516) who utilized contact lens technicians, about 81 percent

used one, about 12 percent used two, and about 7 percent used three or more. Of the 6,655 optometrists who reported using only one assistant of any type, only 8 practitioners (0.1 percent) reported that this one assistant was a contact lens technician. Of optometrists who reported that they used two assistants of any type, only 1-2 percent reported that the two included at least one contact lens technician. When the optometrist used three or more assistants of any type, there was a somewhat stronger tendency to include contact lens technicians--about 11 percent of these optometrists reported using one or more contact lens technicians.

The following tabulation shows the extent to which the utilization of contact lens technicians was reflected in the tendency to render specific patient services.

Patient service	Users	Nonusers
	Percent	
Refractions-----	98	99
Visual field examination--	66	76
Tonometry-----	62	66
Aniseikonic testing-----	13	8
Biomicroscopy-----	44	32
Ophthalmoscopy-----	90	93
Contact lens fitting-----	90	79
Visual training (orthoptics)-----	38	50
Developmental vision-----	21	29
Prescribing low vision aids-----	41	41
Visual readiness for reading-----	19	26
Dispensing and adjusting eyeware-----	82	94
Frame repairs-----	72	85
Fabrication of eyeware---	38	36

The use of contact lens technicians understandably increased the tendency to perform the service of contact lens fitting, evidently at the expense of most other patient services with aniseikonic testing and biomicroscopy being interesting exceptions.

Utilization of Optical Technicians

There were 1,596 reports of utilization for optical technicians (shopmen). They were dis-

tributed according to the following conditions of usage. About 28 percent of the reports of utilization specified utilization on a *full-time unshared* basis, 51 percent on a *full-time shared* basis, 12 percent of the reports specified *part-time unshared* utilization, and 9 percent specified *part-time shared* utilization. As it was with optometric technicians, dispensing opticians, and contact lens technicians, there is a clear preference for full-time shared utilization of this type of assistant.

Of the 1,474 optometrists who utilized optical technicians (shopmen), about 67 percent used one, about 17 percent used two, and about 17 percent used three or more. Of optometrists who reported using only one assistant of any type, fewer than 1 percent reported that this one assistant was an optical technician. Of those who reported that they used two assistants of any type, again only a small proportion (about 7 percent) reported that the two included at least one optical technician. However, among optometrists who reported the use of three or more assistants of any type, a more substantial proportion (about 30 percent) tended to use one or more optical technicians.

The following tabulation shows the extent to which the utilization of optical technicians was reflected in the tendency to render specific patient services.

Patient service	Users	Nonusers
	Percent	
Refractions-----	99	99
Visual field examination--	69	76
Tonometry-----	62	66
Aniseikonic testing-----	7	8
Biomicroscopy-----	35	32
Ophthalmoscopy-----	93	92
Contact lens fitting-----	78	79
Visual training (orthoptics)-----	39	51
Developmental vision-----	22	29
Prescribing low vision aids-----	38	41
Visual readiness for reading-----	20	26
Dispensing and adjusting eyeware-----	93	94
Frame repairs-----	84	85
Fabrication of eyeware---	61	34

Predictably, users of optical technicians showed an increased tendency towards the fabrication of eyewear. As a possible consequence of this increased emphasis, the tendency was to reduce the provision of most of the other patient services.

The optometrist's utilization of supplementary personnel is summarized in the table that follows:

Type of assistant	Number of reports of utilization
Secretaries/receptionists-----	14,661
General optometric assistants--	4,832
Optometric technicians-----	707
Dispensing opticians-----	2,455
Contact lens technicians-----	539
Optical technicians (shopmen)--	1,586
Other type personnel (e.g., orthoptists)-----	707

Optometrists were not the only professional group with a need for supplementary eye-care personnel. Ophthalmologists used them too. The findings of the 1968 survey of ophthalmologists suggest a substantial overlap between optometrists and ophthalmologists in their need for and use of certain types of eye-care personnel. For example, among ophthalmologists surveyed, there were 1,790 reports of utilization of optical fitters (including opticians). There were also 1,263 reports of utilization of laboratory, ophthalmic, and contact lens technicians, 646 reports of utilization of orthoptists, 222 reports of utilization of optometrists, and 439 reports of utilization of other clinical (eye-care) assistants (Series 14, Number 9).

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Table 1. Number and percent distribution of optometrists by number of patient visits per week, according to State: United States, 1968

State	Total optometrists	Number of patient visits per week				
		Less than 25	25-49	50-74	75-99	100 or more
United States-----	18,299	1,578	3,762	4,989	2,750	5,221
Alabama-----	180	6	28	47	29	69
Alaska-----	17	1	1	5	6	3
Arizona-----	177	7	28	36	20	36
Arkansas-----	151	13	28	34	27	49
California-----	2,222	188	484	675	298	577
Colorado-----	186	17	39	60	30	39
Connecticut-----	258	36	64	72	47	38
Delaware-----	35	6	8	8	9	4
District of Columbia-----	71	7	11	18	17	18
Florida-----	493	40	93	136	98	126
Georgia-----	261	13	37	60	57	96
Hawaii-----	64	14	24	14	5	7
Idaho-----	86	7	19	27	18	16
Illinois-----	1,602	203	353	415	194	437
Indiana-----	503	41	94	126	89	153
Iowa-----	336	16	44	72	53	150
Kansas-----	229	18	33	66	36	76
Kentucky-----	229	19	44	55	37	74
Louisiana-----	222	28	55	56	22	60
Maine-----	116	13	23	34	13	33
Maryland-----	174	11	41	47	40	35
Massachusetts-----	714	92	230	199	85	108
Michigan-----	708	33	114	204	125	231
Minnesota-----	353	13	48	106	60	126
Mississippi-----	120	8	29	25	22	35
Missouri-----	431	38	89	113	62	130
Montana-----	89	8	30	19	11	21
Nebraska-----	155	12	27	40	33	43
Nevada-----	36	1	10	10	4	11
New Hampshire-----	70	3	10	25	15	17
New Jersey-----	674	79	205	191	75	123
New Mexico-----	71	2	6	30	14	19
New York-----	1,587	120	293	410	209	555
North Carolina-----	320	22	79	85	51	83
North Dakota-----	72	1	17	21	13	21
Ohio-----	927	67	155	273	146	286
Oklahoma-----	245	20	39	66	37	82
Oregon-----	265	19	70	71	43	61
Pennsylvania-----	1,133	141	262	283	177	270
Rhode Island-----	132	18	33	39	12	30
South Carolina-----	155	10	31	49	15	50
South Dakota-----	94	9	20	31	13	21
Tennessee-----	292	21	49	63	51	108
Texas-----	740	46	119	179	117	280
Utah-----	74	1	13	24	11	26
Vermont-----	38	1	9	12	5	11
Virginia-----	272	18	57	75	42	80
Washington-----	356	28	62	97	59	110
West Virginia-----	147	14	24	41	20	48
Wisconsin-----	428	28	71	131	72	125
Wyoming-----	41	3	10	10	5	12

Table 1. Number and percent distribution of optometrists by number of patient visits per week, according to State: United States, 1968—Con.

State	Total optometrists	Number of patient visits per week				
		Less than 25	25-49	50-74	75-99	100 or more
Percent distribution						
United States-----	100.0	8.6	20.6	27.3	15.0	28.5
Alabama-----	100.0	3.1	15.7	26.4	16.4	38.4
Alaska-----	100.0	6.3	6.3	31.3	37.5	18.8
Arizona-----	100.0	5.2	21.7	28.7	15.7	28.7
Arkansas-----	100.0	8.3	18.4	22.8	17.7	32.4
California-----	100.0	4.5	21.8	30.4	13.4	26.0
Colorado-----	100.0	9.3	20.9	32.6	16.3	20.9
Connecticut-----	100.0	14.0	24.8	28.0	18.4	14.8
Delaware-----	100.0	16.7	23.3	23.3	26.7	10.0
District of Columbia-----	100.0	10.2	15.3	25.4	23.7	25.4
Florida-----	100.0	8.2	18.9	27.5	19.8	25.6
Georgia-----	100.0	4.8	14.1	22.9	21.7	36.6
Hawaii-----	100.0	21.3	37.7	21.3	8.2	11.5
Idaho-----	100.0	7.8	22.1	31.2	20.8	18.2
Illinois-----	100.0	12.7	22.0	25.9	12.1	27.3
Indiana-----	100.0	8.2	18.7	25.1	17.6	30.5
Iowa-----	100.0	4.8	13.2	21.5	15.8	44.7
Kansas-----	100.0	7.9	14.4	28.7	15.7	33.3
Kentucky-----	100.0	8.4	19.2	23.8	16.4	32.2
Louisiana-----	100.0	12.6	24.8	25.3	10.1	27.3
Maine-----	100.0	11.0	20.2	29.4	11.0	28.4
Maryland-----	100.0	6.3	23.8	26.9	23.1	20.0
Massachusetts-----	100.0	12.8	32.2	27.9	11.9	15.1
Michigan-----	100.0	4.7	16.2	28.8	17.7	32.6
Minnesota-----	100.0	3.6	13.6	30.0	17.0	35.8
Mississippi-----	100.0	7.0	24.6	21.1	18.4	29.0
Missouri-----	100.0	8.8	20.6	26.3	14.3	30.1
Montana-----	100.0	8.5	34.2	22.0	12.2	23.2
Nebraska-----	100.0	7.5	17.1	26.0	21.2	28.1
Nevada-----	100.0	3.0	27.3	27.3	12.1	30.3
New Hampshire-----	100.0	4.6	13.6	36.4	21.2	24.2
New Jersey-----	100.0	11.7	30.5	28.3	11.2	18.3
New Mexico-----	100.0	2.9	8.7	42.0	20.3	26.1
New York-----	100.0	7.5	18.5	25.9	13.2	35.0
North Carolina-----	100.0	6.8	24.7	26.7	15.9	26.0
North Dakota-----	100.0	1.6	23.8	28.6	17.5	28.6
Ohio-----	100.0	7.3	16.7	29.5	15.7	30.8
Oklahoma-----	100.0	8.3	15.7	27.1	15.3	33.6
Oregon-----	100.0	7.2	26.4	26.8	16.4	23.2
Pennsylvania-----	100.0	12.5	23.1	25.0	15.6	23.8
Rhode Island-----	100.0	13.5	25.2	29.4	9.2	22.7
South Carolina-----	100.0	6.2	20.0	31.7	9.7	32.4
South Dakota-----	100.0	9.1	21.6	33.0	13.6	22.7
Tennessee-----	100.0	7.3	16.7	21.5	17.5	37.1
Texas-----	100.0	6.2	16.1	24.2	15.8	37.9
Utah-----	100.0	1.6	17.5	31.8	14.3	34.9
Vermont-----	100.0	2.9	22.9	31.4	14.3	28.6
Virginia-----	100.0	6.5	21.1	27.5	15.4	29.6
Washington-----	100.0	7.9	17.3	27.3	16.7	30.9
West Virginia-----	100.0	9.4	16.6	28.1	13.7	32.4
Wisconsin-----	100.0	6.6	16.7	30.6	16.9	29.3
Wyoming-----	100.0	8.3	25.0	25.0	11.1	30.6

Table 2. Number and percent distribution of optometrists by number of patient visits per week, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of patient visits per week				
		Less than 25	25-49	50-74	75-99	100 or more
Number						
United States-----	18,299	1,578	3,762	4,989	2,750	5,221
Geographic region						
Northeast-----	4,721	502	1,129	1,266	639	1,185
North Central-----	5,838	479	1,065	1,599	894	1,801
South-----	4,107	301	772	1,045	691	1,297
West-----	3,633	296	795	1,079	525	938
Geographic division						
New England-----	1,327	162	369	382	178	237
Middle Atlantic-----	3,394	340	760	885	461	948
East North Central-----	4,168	373	788	1,149	625	1,233
West North Central-----	1,670	106	278	449	269	568
South Atlantic-----	1,929	140	382	519	349	540
East South Central-----	820	55	150	190	140	286
West South Central-----	1,358	107	240	336	203	472
Mountain-----	709	46	155	245	113	179
Pacific-----	2,924	250	641	862	413	759
Standard Federal Administrative Region						
Region I-----	1,327	162	369	382	178	237
Region II-----	2,261	199	498	601	284	678
Region III-----	1,834	197	404	473	306	454
Region IV-----	2,049	139	390	520	360	641
Region V-----	4,521	386	836	1,255	685	1,359
Region VI-----	1,429	109	246	365	218	490
Region VII-----	1,151	84	192	292	183	400
Region VIII-----	556	39	130	165	82	140
Region IX-----	2,448	209	545	735	327	631
Region X-----	725	55	152	200	127	191
Age of optometrist						
Under 25 years-----	62	9	17	11	9	18
25-34 years-----	2,004	152	476	558	306	512
35-44 years-----	5,400	252	940	1,509	907	1,791
45-54 years-----	6,632	406	1,199	1,843	1,106	2,079
55-64 years-----	2,601	243	667	742	311	638
65-74 years-----	1,205	325	373	270	87	149
75 years and over-----	396	191	90	56	25	34
Sex of optometrist						
Male-----	17,912	1,495	3,656	4,900	2,711	5,150
Female-----	387	84	106	89	38	70
Number of States licensed in						
No States-----	20	2	7	10	-	1
1 State-----	13,920	1,299	2,915	3,758	2,034	3,913
2 States-----	3,355	212	652	949	551	990
3 States or more-----	1,005	65	188	271	164	316
Hours per week usually worked						
1-34 hours-----	2,153	730	569	414	159	281
35-39 hours-----	2,897	178	747	857	458	656
40 hours-----	4,218	273	885	1,236	660	1,165
41-44 hours-----	2,330	108	475	638	385	724
45-48 hours-----	3,431	162	616	970	540	1,143
49 hours or more-----	3,269	126	470	874	547	1,252

Table 2. Number and percent distribution of optometrists by number of patient visits per week, according to geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of patient visits per week				
		Less than 25	25-49	50-74	75-99	100 or more
Percent distribution						
United States-----	100.0	8.6	20.6	27.3	15.0	28.5
<u>Geographic region</u>						
Northeast-----	100.0	10.6	23.9	26.8	13.5	25.1
North Central-----	100.0	8.2	18.3	27.4	15.3	30.8
South-----	100.0	7.3	18.8	25.4	16.8	31.6
West-----	100.0	8.1	21.9	29.7	14.5	25.8
<u>Geographic division</u>						
New England-----	100.0	12.2	27.8	28.8	13.4	17.8
Middle Atlantic-----	100.0	10.0	22.4	26.1	13.6	27.9
East North Central-----	100.0	9.0	18.9	27.6	15.0	29.6
West North Central-----	100.0	6.4	16.6	26.9	16.1	34.0
South Atlantic-----	100.0	7.2	19.8	26.9	18.1	28.0
East South Central-----	100.0	6.7	18.3	23.2	17.1	34.8
West South Central-----	100.0	7.9	17.7	24.7	15.0	34.8
Mountain-----	100.0	6.5	21.8	30.5	15.9	25.3
Pacific-----	100.0	8.5	21.9	29.5	14.1	26.0
<u>Standard Federal Administrative Region</u>						
Region I-----	100.0	12.2	27.8	28.8	13.4	17.8
Region II-----	100.0	8.8	22.0	26.6	12.6	30.0
Region III-----	100.0	10.7	22.0	25.8	16.7	24.8
Region IV-----	100.0	6.8	19.0	25.4	17.6	31.3
Region V-----	100.0	8.5	18.5	27.8	15.2	30.1
Region VI-----	100.0	7.7	17.2	25.6	15.2	34.3
Region VII-----	100.0	7.3	16.7	25.4	15.9	34.7
Region VIII-----	100.0	7.0	23.4	29.8	14.7	25.2
Region IX-----	100.0	8.6	22.3	30.0	13.4	25.8
Region X-----	100.0	7.6	20.9	27.7	17.6	26.3
<u>Age of optometrist</u>						
Under 25 years-----	100.0	13.8	26.7	17.3	13.9	28.3
25-34 years-----	100.0	7.6	23.8	27.8	15.3	25.5
35-44 years-----	100.0	4.7	17.4	28.0	16.8	33.2
45-54 years-----	100.0	6.1	18.1	27.8	16.7	31.3
55-64 years-----	100.0	9.4	25.7	28.5	12.0	24.5
65-74 years-----	100.0	27.0	31.0	22.5	7.2	12.4
75 years and over-----	100.0	48.3	22.7	14.1	6.3	8.6
<u>Sex of optometrist</u>						
Male-----	100.0	8.3	20.4	27.4	15.1	28.8
Female-----	100.0	21.6	27.4	22.9	9.9	18.2
<u>Number of States licensed in</u>						
No States-----	100.0	11.4	33.3	49.9	-	5.4
1 State-----	100.0	9.3	20.9	27.0	14.6	28.1
2 States-----	100.0	6.3	19.5	28.3	16.4	29.5
3 States or more-----	100.0	6.5	18.7	27.0	16.3	31.5
<u>Hours per week usually worked</u>						
1-34 hours-----	100.0	33.9	26.4	19.2	7.4	13.0
35-39 hours-----	100.0	6.2	25.8	29.6	15.8	22.7
40 hours-----	100.0	6.5	21.0	29.3	15.6	27.6
41-44 hours-----	100.0	4.7	20.4	27.4	16.5	31.1
45-48 hours-----	100.0	4.7	18.0	28.3	15.7	33.3
49 hours or more-----	100.0	3.9	14.4	26.7	16.7	38.3

Table 3. Number and percent distribution of optometrists by number of patient visits per week, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of patient visits per week				
		Less than 25	25-49	50-74	75-99	100 or more
Number						
United States-----	18,299	1,578	3,762	4,989	2,750	5,221
<u>Principal form of employment</u>						
Self employed:						
Solo practice-----	13,510	1,254	3,104	3,886	2,024	3,241
Partnership-----	2,178	88	305	526	345	913
Group practice-----	530	29	60	123	74	244
Employed by:						
Optometrists-----	951	62	147	239	122	381
Ophthalmologists or other physicians-----	171	10	18	31	34	78
Profit-making firms-----	636	50	83	134	89	282
Nonprofit organizations (including govern- ment)-----	183	50	26	29	41	38
Other-----	140	35	19	22	20	44
<u>Number of optometrists in partnership or group practice</u>						
2 optometrists-----	2,105	101	306	505	335	859
3 optometrists-----	421	13	46	100	58	205
4 optometrists or more-----	182	3	15	44	27	93
Not applicable-----	15,592	1,461	3,396	4,340	2,330	4,064
<u>Number of office locations</u>						
1 office-----	15,083	1,368	3,097	4,103	2,272	4,243
2 offices-----	2,806	181	590	787	421	826
3 offices or more-----	410	29	75	98	57	152
<u>Number of patients seen per week</u>						
Less than 25 patients-----	4,086	1,578	1,549	709	117	133
25-49 patients-----	6,886	-	2,214	2,723	988	961
50-74 patients-----	3,719	-	-	1,556	975	1,188
75-99 patients-----	1,726	-	-	-	669	1,058
100 patients or more-----	1,881	-	-	-	-	1,881
<u>Number of supplementary helpers of all types</u>						
No assistant-----	3,960	910	1,352	1,000	278	420
1 assistant-----	6,655	408	1,511	2,134	1,132	1,470
2 assistants-----	3,883	132	543	1,051	720	1,437
3 assistants or more-----	3,801	129	356	803	620	1,894
<u>Number of optometric services rendered</u>						
1-3 services-----	900	261	216	186	78	159
4-6 services-----	4,075	532	930	1,052	473	1,089
7-9 services-----	7,344	495	1,509	2,070	1,152	2,118
10 services or more-----	5,980	290	1,107	1,680	1,047	1,856
<u>Type of optometric service</u>						
Refractions-----	18,238	1,561	3,752	4,973	2,746	5,206
Visual field examination-----	13,780	1,002	2,787	3,878	2,219	3,894
Tonometry-----	12,098	653	2,254	3,436	2,043	3,712
Aniseikonic testing-----	1,528	127	299	376	230	496
Blomicroscopy-----	5,907	274	1,012	1,662	1,038	1,921
Ophthalmoscopy-----	16,928	1,244	3,423	4,700	2,642	4,918
Contact lens fitting-----	14,521	817	2,821	4,080	2,343	4,460
Visual training (orthoptics)- -----	9,128	670	1,917	2,561	1,496	2,485
Developmental vision-----	5,225	352	1,056	1,476	875	1,467
Prescribing low vision aids-----	7,450	443	1,404	2,040	1,269	2,294
Visual readiness for reading-----	4,735	328	963	1,351	778	1,315
Dispensing and adjusting eyeware-----	17,122	1,350	3,511	4,712	2,595	4,953
Frame repairs-----	15,532	1,128	3,115	4,285	2,402	4,602
Fabrication of eyeware-----	6,610	354	1,243	1,746	1,057	2,210
Other-----	718	37	139	193	127	222

Table 3. Number and percent distribution of optometrists by number of patient visits per week, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of patient visits per week				
		Less than 25	25-49	50-74	75-99	100 or more
Percent distribution						
United States-----	100.0	8.6	20.6	27.3	15.0	28.5
<u>Principal form of employment</u>						
Self employed:						
Solo practice-----	100.0	9.3	23.0	28.8	15.0	24.0
Partnership-----	100.0	4.0	14.0	24.2	15.9	41.9
Group practice-----	100.0	5.5	11.4	23.1	14.0	46.0
Employed by:						
Optometrists-----	100.0	6.5	15.5	25.2	12.9	40.0
Ophthalmologists or other physicians-----	100.0	5.9	10.3	18.0	20.0	45.8
Profit-making firms-----	100.0	7.8	13.0	21.0	13.9	44.3
Nonprofit organizations (including govern- ment)-----	100.0	27.4	14.0	15.6	22.2	20.8
Other-----	100.0	25.4	13.3	15.8	14.2	31.4
<u>Number of optometrists in partnership or group practice</u>						
2 optometrists-----	100.0	4.8	14.5	24.0	15.9	40.8
3 optometrists-----	100.0	3.1	10.8	23.6	13.7	48.7
4 optometrists or more-----	100.0	1.8	8.0	24.3	14.9	51.0
Not applicable-----	100.0	9.4	21.8	27.8	14.9	26.1
<u>Number of office locations</u>						
1 office-----	100.0	9.1	20.5	27.2	15.1	28.1
2 offices-----	100.0	6.5	21.0	28.1	15.0	29.4
3 offices or more-----	100.0	7.0	18.3	23.9	13.9	37.0
<u>Number of patients seen per week</u>						
Less than 25 patients-----	100.0	38.6	37.9	17.4	2.9	3.3
25-49 patients-----	100.0	-	32.2	39.5	14.4	14.0
50-74 patients-----	100.0	-	-	41.8	26.2	31.9
75-99 patients-----	100.0	-	-	-	38.7	61.3
100 patients or more-----	100.0	-	-	-	-	100.0
<u>Number of supplementary helpers of all types</u>						
No assistant-----	100.0	23.0	34.1	25.3	7.0	10.6
1 assistant-----	100.0	6.1	22.7	32.1	17.0	22.1
2 assistants-----	100.0	3.4	14.0	27.1	18.5	37.0
3 assistants or more-----	100.0	3.4	9.4	21.1	16.3	49.8
<u>Number of optometric services rendered</u>						
1-3 services-----	100.0	29.0	24.1	20.7	8.6	17.6
4-6 services-----	100.0	13.1	22.8	25.8	11.6	26.7
7-9 services-----	100.0	6.8	20.6	28.2	15.7	28.8
10 services or more-----	100.0	4.9	18.5	28.1	17.5	31.0
<u>Type of optometric service</u>						
Refractions-----	100.0	8.6	20.6	27.3	15.1	28.5
Visual field examination-----	100.0	7.3	20.2	28.1	16.1	28.3
Tonometry-----	100.0	5.4	18.6	28.4	16.9	30.7
Aniseikonic testing-----	100.0	8.3	19.6	24.6	15.1	32.4
Biomicroscopy-----	100.0	4.6	17.1	28.1	17.6	32.5
Ophthalmoscopy-----	100.0	7.4	20.2	27.8	15.6	29.1
Contact lens fitting-----	100.0	5.6	19.4	28.1	16.1	30.7
Visual training (orthoptics)-----	100.0	7.3	21.0	28.1	16.4	27.2
Developmental vision-----	100.0	6.7	20.2	28.3	16.8	28.1
Prescribing low vision aids-----	100.0	5.9	18.9	27.4	17.0	30.8
Visual readiness for reading-----	100.0	6.9	20.3	28.5	16.4	27.8
Dispensing and adjusting eyewear-----	100.0	7.9	20.5	27.5	15.2	28.9
Frame repairs-----	100.0	7.3	20.1	27.6	15.5	29.6
Fabrication of eyewear-----	100.0	5.4	18.8	26.4	16.0	33.4
Other-----	100.0	5.2	19.4	26.9	17.6	31.0

Table 4. Number and percent distribution of optometrists by number of patients seen per week, according to State: United States, 1968

State	Total optometrists	Number of patients seen per week				
		Less than 25	25-49	50-74	75-99	100 or more
		Number				
United States-----	18,299	4,086	6,886	3,719	1,726	1,881
Alabama-----	180	23	71	50	15	21
Alaska-----	17	2	7	4	2	1
Arizona-----	127	21	52	30	10	14
Arkansas-----	151	31	53	30	14	22
California-----	2,222	551	767	447	232	225
Colorado-----	186	41	70	45	13	16
Connecticut-----	258	71	104	60	14	8
Delaware-----	35	9	18	5	1	2
District of Columbia-----	71	15	24	7	18	7
Florida-----	493	123	195	104	40	31
Georgia-----	261	39	87	57	37	42
Hawaii-----	64	25	28	5	3	2
Idaho-----	86	24	28	19	9	7
Illinois-----	1,602	418	577	306	126	175
Indiana-----	503	98	194	112	51	48
Iowa-----	336	53	114	66	50	53
Kansas-----	229	34	99	41	27	29
Kentucky-----	229	47	87	50	24	21
Louisiana-----	222	63	91	44	10	15
Maine-----	116	27	48	22	13	6
Maryland-----	174	35	74	31	23	12
Massachusetts-----	714	230	308	105	41	29
Michigan-----	708	87	285	186	76	75
Minnesota-----	353	56	137	74	33	54
Mississippi-----	120	33	39	27	13	8
Missouri-----	431	92	170	91	33	45
Montana-----	89	18	41	12	9	9
Nebraska-----	155	31	51	38	16	19
Nevada-----	36	9	14	8	1	4
New Hampshire-----	70	11	37	11	7	4
New Jersey-----	674	210	283	103	33	44
New Mexico-----	71	5	38	11	7	9
New York-----	1,587	249	601	363	160	215
North Carolina-----	320	97	129	59	21	14
North Dakota-----	72	13	32	14	9	5
Ohio-----	927	172	315	212	103	125
Oklahoma-----	245	54	94	45	36	16
Oregon-----	265	68	96	52	22	27
Pennsylvania-----	1,133	325	421	199	106	82
Rhode Island-----	132	42	47	27	10	7
South Carolina-----	155	33	64	31	14	13
South Dakota-----	94	27	32	22	10	3
Tennessee-----	292	58	100	66	28	40
Texas-----	740	129	234	154	85	138
Utah-----	74	17	21	19	6	12
Vermont-----	38	8	17	5	4	3
Virginia-----	272	56	121	55	19	21
Washington-----	356	82	130	71	31	42
West Virginia-----	147	39	55	30	13	11
Wisconsin-----	428	82	165	89	46	45
Wyoming-----	41	8	20	7	2	3

Table 4. Number and percent distribution of optometrists by number of patients seen per week, according to State: United States, 1968—Con.

State	Total optometrists	Number of patients seen per week				
		Less than 25	25-49	50-74	75-99	100 or more
Percent distribution						
United States-----	100.0	22.3	37.6	20.3	9.4	10.3
Alabama-----	100.0	12.6	39.6	27.7	8.2	12.0
Alaska-----	100.0	12.5	43.8	25.0	12.5	6.3
Arizona-----	100.0	16.5	40.9	23.5	7.8	11.3
Arkansas-----	100.0	20.6	35.3	19.9	9.6	14.7
California-----	100.0	24.8	34.5	20.1	10.5	10.1
Colorado-----	100.0	22.1	37.8	24.4	7.0	8.7
Connecticut-----	100.0	27.6	40.4	23.2	5.6	3.2
Delaware-----	100.0	26.7	50.0	13.3	3.3	6.7
District of Columbia-----	100.0	20.3	33.9	10.2	25.4	10.2
Florida-----	100.0	25.0	39.6	21.1	8.2	6.2
Georgia-----	100.0	14.9	33.3	21.7	14.1	16.1
Hawaii-----	100.0	39.3	44.3	8.2	4.9	3.3
Idaho-----	100.0	27.3	32.5	22.1	10.4	7.8
Illinois-----	100.0	26.1	36.0	19.1	7.9	10.9
Indiana-----	100.0	19.5	38.6	22.3	10.1	9.4
Iowa-----	100.0	15.8	34.1	19.6	14.8	15.8
Kansas-----	100.0	14.8	43.1	18.1	11.6	12.5
Kentucky-----	100.0	20.6	37.9	22.0	10.3	9.4
Louisiana-----	100.0	28.3	40.9	19.7	4.6	6.6
Maine-----	100.0	22.9	41.3	19.3	11.0	5.5
Maryland-----	100.0	20.0	42.5	17.5	13.1	6.9
Massachusetts-----	100.0	32.2	43.2	14.7	5.8	4.1
Michigan-----	100.0	12.4	40.2	26.2	10.7	10.5
Minnesota-----	100.0	15.8	38.8	20.9	9.4	15.2
Mississippi-----	100.0	27.2	32.5	22.8	10.5	7.0
Missouri-----	100.0	21.3	39.4	21.1	7.8	10.5
Montana-----	100.0	20.7	46.3	13.4	9.8	9.8
Nebraska-----	100.0	19.9	32.9	24.7	10.3	12.3
Nevada-----	100.0	24.2	39.4	21.2	3.0	12.1
New Hampshire-----	100.0	15.2	53.0	15.2	10.6	6.1
New Jersey-----	100.0	31.1	42.0	15.3	4.9	6.6
New Mexico-----	100.0	7.3	53.6	15.9	10.1	13.0
New York-----	100.0	15.7	37.9	22.8	10.1	13.6
North Carolina-----	100.0	30.4	40.2	18.6	6.4	4.4
North Dakota-----	100.0	17.5	44.4	19.1	12.7	6.4
Ohio-----	100.0	18.6	34.0	22.9	11.1	13.5
Oklahoma-----	100.0	21.8	38.4	18.3	14.9	6.6
Oregon-----	100.0	25.6	36.4	19.6	8.4	10.0
Pennsylvania-----	100.0	28.7	37.2	17.6	9.4	7.2
Rhode Island-----	100.0	31.9	35.3	20.2	7.6	5.0
South Carolina-----	100.0	21.4	41.4	20.0	9.0	8.3
South Dakota-----	100.0	28.4	34.1	23.9	10.2	3.4
Tennessee-----	100.0	20.0	34.2	22.6	9.5	13.8
Texas-----	100.0	17.4	31.7	20.8	11.5	18.7
Utah-----	100.0	22.2	28.6	25.4	7.9	15.9
Vermont-----	100.0	20.0	45.7	14.3	11.4	8.6
Virginia-----	100.0	20.7	44.5	20.2	6.9	7.7
Washington-----	100.0	23.0	36.4	20.0	8.8	11.8
West Virginia-----	100.0	26.6	37.4	20.1	8.6	7.2
Wisconsin-----	100.0	19.2	38.6	20.7	10.9	10.6
Wyoming-----	100.0	19.4	50.0	16.7	5.6	8.3

Table 5. Number and percent distribution of optometrists by number of patients seen per week, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of patients seen per week				
		Less than 25	25-49	50-74	75-99	100 or more
United States-----	18,299	4,086	6,886	3,719	1,726	1,881
Number						
<u>Geographic region</u>						
Northeast-----	4,721	1,171	1,866	894	390	400
North Central-----	5,838	1,162	2,171	1,251	580	675
South-----	4,107	883	1,536	844	409	436
West-----	3,633	870	1,313	730	348	371
<u>Geographic division</u>						
New England-----	1,327	388	561	229	90	58
Middle Atlantic-----	3,394	783	1,305	665	299	342
East North Central-----	4,168	858	1,536	905	402	468
West North Central-----	1,670	304	635	346	178	207
South Atlantic-----	1,929	446	767	378	185	153
East South Central-----	820	161	296	193	78	92
West South Central-----	1,358	276	473	272	146	191
Mountain-----	709	142	285	151	57	75
Pacific-----	2,924	728	1,029	580	291	296
<u>Standard Federal Administrative Region</u>						
Region I-----	1,327	388	561	229	90	58
Region II-----	2,261	458	884	466	193	260
Region III-----	1,834	479	713	327	180	135
Region IV-----	2,049	453	771	444	190	191
Region V-----	4,521	913	1,673	979	435	521
Region VI-----	1,429	281	511	284	153	201
Region VII-----	1,151	209	434	236	126	146
Region VIII-----	556	123	217	119	49	48
Region IX-----	2,448	606	861	490	246	245
Region X-----	725	176	261	147	65	76
<u>Age of optometrist</u>						
Under 25 years-----	62	15	25	13	7	2
25-34 years-----	2,004	434	731	419	208	212
35-44 years-----	5,400	879	2,024	1,243	599	655
45-54 years-----	6,632	1,236	2,588	1,402	663	743
55-64 years-----	2,601	702	1,039	471	190	200
65-74 years-----	1,205	569	383	141	55	57
75 years and over-----	396	251	96	31	6	12
<u>Sex of optometrist</u>						
Male-----	17,912	3,940	6,753	3,666	1,702	1,850
Female-----	387	146	133	53	24	31
<u>Number of States licensed in</u>						
No States-----	20	7	8	4	-	1
1 State-----	13,920	3,217	5,214	2,804	1,272	1,414
2 States-----	3,355	683	1,284	699	326	363
3 States or more-----	1,005	179	381	212	128	103
<u>Hours per week usually worked</u>						
1-34 hours-----	2,153	1,082	627	264	91	87
35-39 hours-----	2,897	649	1,199	566	264	220
40 hours-----	4,218	878	1,651	882	402	405
41-44 hours-----	2,330	440	884	493	247	266
45-48 hours-----	3,431	579	1,337	751	342	423
49 hours or more-----	3,269	457	1,188	764	380	480

Table 5. Number and percent distribution of optometrists by number of patients seen per week, according to geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of patients seen per week				
		Less than 25	25-49	50-74	75-99	100 or more
Percent distribution						
United States-----	100.0	22.3	37.6	20.3	9.4	10.3
<u>Geographic region</u>						
Northeast-----	100.0	24.8	39.5	19.0	8.3	8.5
North Central-----	100.0	19.9	37.2	21.4	9.9	11.6
South-----	100.0	21.5	37.4	20.5	10.0	10.6
West-----	100.0	24.0	36.2	20.1	9.6	10.2
<u>Geographic division</u>						
New England-----	100.0	29.2	42.3	17.3	6.8	4.4
Middle Atlantic-----	100.0	23.1	38.5	19.6	8.8	10.1
East North Central-----	100.0	20.6	36.9	21.7	9.6	11.2
West North Central-----	100.0	18.2	38.0	20.7	10.6	12.4
South Atlantic-----	100.0	23.1	39.8	19.6	9.6	7.9
East South Central-----	100.0	19.6	36.2	23.5	9.6	11.2
West South Central-----	100.0	20.3	34.8	20.1	10.8	14.1
Mountain-----	100.0	20.0	40.2	21.2	8.0	10.5
Pacific-----	100.0	24.9	35.2	19.8	10.0	10.1
<u>Standard Federal Administrative Region</u>						
Region I-----	100.0	29.2	42.3	17.3	6.8	4.4
Region II-----	100.0	20.3	39.1	20.6	8.5	11.5
Region III-----	100.0	26.1	38.9	17.8	9.8	7.4
Region IV-----	100.0	22.0	37.6	21.7	9.3	9.3
Region V-----	100.0	20.2	37.0	21.6	9.6	11.5
Region VI-----	100.0	19.7	35.7	19.9	10.7	14.0
Region VII-----	100.0	18.2	37.7	20.5	10.9	12.7
Region VIII-----	100.0	22.2	39.1	21.4	8.7	8.6
Region IX-----	100.0	24.7	35.2	20.0	10.1	10.0
Region X-----	100.0	24.2	36.1	20.2	8.9	10.5
<u>Age of optometrist</u>						
Under 25 years-----	100.0	24.4	40.6	20.9	10.5	3.5
25-34 years-----	100.0	21.7	36.5	20.9	10.4	10.6
35-44 years-----	100.0	16.3	37.5	23.0	11.1	12.1
45-54 years-----	100.0	18.6	39.0	21.2	10.0	11.2
55-64 years-----	100.0	27.0	39.9	18.1	7.3	7.7
65-74 years-----	100.0	47.2	31.8	11.7	4.5	4.8
75 years and over-----	100.0	63.5	24.3	7.7	1.4	3.1
<u>Sex of optometrist</u>						
Male-----	100.0	22.0	37.7	20.5	9.5	10.3
Female-----	100.0	37.7	34.4	13.6	6.3	8.0
<u>Number of States licensed in</u>						
No States-----	100.0	33.2	39.2	22.2	-	5.4
1 State-----	100.0	23.1	37.5	20.1	9.1	10.2
2 States-----	100.0	20.4	38.5	20.8	9.7	10.8
3 States or more-----	100.0	17.9	37.9	21.1	12.8	10.3
<u>Hours per week usually worked</u>						
1-34 hours-----	100.0	50.3	29.1	12.3	4.3	4.1
35-39 hours-----	100.0	22.4	41.4	19.5	9.1	7.6
40 hours-----	100.0	20.8	39.1	20.9	9.5	9.6
41-44 hours-----	100.0	18.9	37.9	21.2	10.6	11.4
45-48 hours-----	100.0	16.9	39.0	21.9	10.0	12.3
49 hours or more-----	100.0	14.0	36.3	23.4	11.6	14.7

Table 6. Number and percent distribution of optometrists by number of patients seen per week, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of patients seen per week				
		Less than 25	25-49	50-74	75-99	100 or more
United States-----	18,299	4,086	6,886	3,719	1,726	1,881
Principal form of employment						
Self employed:						
Solo practice-----	13,510	3,404	5,478	2,571	1,082	975
Partnership-----	2,178	259	729	533	271	384
Group practice-----	530	61	151	127	60	132
Employed by:						
Optometrists-----	951	152	278	236	121	163
Ophthalmologists or other physicians-----	171	17	29	36	43	46
Profit-making firms-----	636	84	164	163	88	138
Nonprofit organizations (including government)-----	183	62	34	27	36	24
Other-----	140	48	23	25	25	19
Number of optometrists in partnership or group practice						
2 optometrists-----	2,105	279	714	505	257	350
3 optometrists-----	421	36	117	111	58	100
4 optometrists or more-----	182	6	50	45	16	67
Not applicable-----	15,592	3,766	6,006	3,059	1,396	1,365
Number of office locations						
1 office-----	15,083	3,462	5,678	3,048	1,407	1,488
2 offices-----	2,806	556	1,069	590	274	317
3 offices or more-----	410	68	140	81	45	76
Number of patient visits per week						
Less than 25 visits-----	1,578	1,578	-	-	-	-
25-49 visits-----	3,762	1,549	2,214	-	-	-
50-74 visits-----	4,989	709	2,723	1,556	-	-
75-99 visits-----	2,750	117	988	975	669	-
100 visits or more-----	5,221	133	961	1,188	1,058	1,881
Number of supplementary helpers of all types						
None-----	3,960	1,812	1,447	459	142	101
1 assistant-----	6,655	1,459	2,912	1,368	525	392
2 assistants-----	3,883	491	1,498	942	464	489
3 assistants or more-----	3,801	325	1,028	952	596	900
Number of optometric services rendered						
1-3 services-----	900	356	245	148	72	78
4-6 services-----	4,075	1,131	1,463	727	327	427
7-9 services-----	7,344	1,532	2,892	1,534	695	691
10 services or more-----	5,980	1,068	2,285	1,310	632	685
Type of optometric service						
Refractions-----	18,238	4,062	6,870	3,710	1,723	1,874
Visual field examination-----	13,780	2,903	5,312	2,827	1,357	1,381
Tonometry-----	12,098	2,187	4,724	2,610	1,252	1,325
Aniseikonic testing-----	1,528	311	532	315	171	199
Biomechanics-----	5,907	978	2,178	1,326	680	744
Ophthalmoscopy-----	16,928	3,575	6,448	3,521	1,638	1,747
Contact lens fitting-----	14,521	2,755	5,556	3,125	1,487	1,596
Visual training (orthoptics)-----	9,128	1,984	3,523	1,852	879	890
Developmental vision-----	5,225	1,046	2,048	1,118	493	521
Prescribing low vision aids-----	7,450	1,395	2,815	1,631	777	831
Visual readiness for reading-----	4,735	941	1,831	1,032	442	489
Dispensing and adjusting eyewear-----	17,122	3,769	6,541	3,509	1,571	1,731
Frame repairs-----	15,532	3,323	5,921	3,237	1,466	1,585
Fabrication of eyewear-----	6,610	1,239	2,439	1,492	667	773
Other-----	718	145	257	149	66	101

Table 6. Number and percent distribution of optometrists by number of patients seen per week, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of patients seen per week				
		Less than 25	25-49	50-74	75-99	100 or more
Percent distribution						
United States-----	100.0	22.3	37.6	20.3	9.4	10.3
<u>Principal form of employment</u>						
Self employed:						
Solo practice-----	100.0	25.2	40.6	19.0	8.0	7.2
Partnership-----	100.0	11.9	33.5	24.5	12.5	17.7
Group practice-----	100.0	11.5	28.5	23.9	11.3	24.9
Employed by:						
Optometrists-----	100.0	16.0	29.3	24.9	12.7	17.2
Ophthalmologists or other physicians-----	100.0	9.7	16.9	21.1	25.2	27.1
Profit-making firms-----	100.0	13.2	25.7	25.5	13.9	21.7
Nonprofit organizations (including government)-----	100.0	33.6	18.7	14.8	19.7	13.1
Other-----	100.0	34.0	16.5	18.2	18.1	13.2
<u>Number of optometrists in partnership or group practice</u>						
2 optometrists-----	100.0	13.2	33.9	24.0	12.2	16.6
3 optometrists-----	100.0	8.5	27.8	26.3	13.7	23.7
4 optometrists or more-----	100.0	3.0	27.2	24.7	8.5	36.5
Not applicable-----	100.0	24.2	38.5	19.6	9.0	8.8
<u>Number of office locations</u>						
1 office-----	100.0	23.0	37.6	20.2	9.3	9.9
2 offices-----	100.0	19.8	38.1	21.0	9.8	11.3
3 offices or more-----	100.0	16.6	34.1	19.8	11.1	18.5
<u>Number of patient visits per week</u>						
Less than 25 visits-----	100.0	100.0	-	-	-	-
25-49 visits-----	100.0	41.2	58.8	-	-	-
50-74 visits-----	100.0	14.2	54.6	31.2	-	-
75-99 visits-----	100.0	4.3	36.0	35.5	24.3	-
100 visits or more-----	100.0	2.5	18.4	22.8	20.3	36.0
<u>Number of supplementary helpers of all types</u>						
None-----	100.0	45.7	36.5	11.6	3.6	2.6
1 assistant-----	100.0	21.9	43.8	20.6	7.9	5.9
2 assistants-----	100.0	12.6	38.6	24.3	11.9	12.6
3 assistants or more-----	100.0	8.6	27.1	25.0	15.7	23.7
<u>Number of optometric services rendered</u>						
1-3 services-----	100.0	39.6	27.3	16.5	8.0	8.6
4-6 services-----	100.0	27.7	35.9	17.9	8.0	10.5
7-9 services-----	100.0	20.9	39.4	20.9	9.5	9.4
10 services or more-----	100.0	17.9	38.2	21.9	10.6	11.5
<u>Type of optometric service</u>						
Refractions-----	100.0	22.3	37.7	20.3	9.5	10.3
Visual field examination-----	100.0	21.1	38.6	20.5	9.9	10.0
Tonometry-----	100.0	18.1	39.1	21.6	10.4	11.0
Aniseikonic testing-----	100.0	20.4	34.8	20.6	11.2	13.0
Blomicroscopy-----	100.0	16.6	36.9	22.5	11.5	12.6
Ophthalmoscopy-----	100.0	21.1	38.1	20.8	9.7	10.3
Contact lens fitting-----	100.0	19.0	38.3	21.5	10.2	11.0
Visual training (orthoptics)-----	100.0	21.7	38.6	20.3	9.6	9.8
Developmental vision-----	100.0	20.0	39.2	21.4	9.4	10.0
Prescribing low vision aids-----	100.0	18.7	37.8	21.9	10.4	11.2
Visual readiness for reading-----	100.0	19.9	38.7	21.8	9.3	10.3
Dispensing and adjusting eyewear-----	100.0	22.0	38.2	20.5	9.2	10.1
Frame repairs-----	100.0	21.4	38.1	20.8	9.4	10.2
Fabrication of eyewear-----	100.0	18.8	36.9	22.6	10.1	11.7
Other-----	100.0	20.2	35.8	20.8	9.2	14.1

Table 7. Number and percent distribution of optometrists by number of supplementary personnel of all types used to assist in practice, according to State: United States, 1968

State	Total optometrists	Number of supplementary personnel of all types			
		None	1	2	3 or more
United States-----	18,299	3,960	6,655	3,883	3,801
Alabama-----	180	10	75	49	46
Alaska-----	17	-	10	3	4
Arizona-----	127	19	53	32	23
Arkansas-----	151	27	64	40	20
California-----	2,222	332	833	526	531
Colorado-----	186	27	60	42	56
Connecticut-----	258	75	99	53	31
Delaware-----	35	9	18	6	2
District of Columbia-----	71	10	18	11	33
Florida-----	493	58	218	139	77
Georgia-----	261	17	110	70	64
Hawaii-----	64	26	21	7	9
Idaho-----	86	12	37	26	11
Illinois-----	1,602	549	458	267	328
Indiana-----	503	91	190	118	105
Iowa-----	336	48	137	77	75
Kansas-----	229	35	93	63	38
Kentucky-----	229	39	116	43	32
Louisiana-----	222	46	83	52	41
Maine-----	116	32	58	15	11
Maryland-----	174	25	49	36	64
Massachusetts-----	714	291	275	88	60
Michigan-----	708	106	230	174	199
Minnesota-----	353	65	119	93	76
Mississippi-----	120	20	61	30	8
Missouri-----	431	94	145	95	97
Montana-----	89	19	41	18	10
Nebraska-----	155	28	64	34	30
Nevada-----	36	8	12	10	7
New Hampshire-----	70	14	32	11	14
New Jersey-----	674	262	244	101	67
New Mexico-----	71	7	35	24	5
New York-----	1,587	453	464	283	388
North Carolina-----	320	33	162	87	37
North Dakota-----	72	10	33	22	7
Ohio-----	927	168	372	183	203
Oklahoma-----	245	28	123	64	30
Oregon-----	265	51	85	65	65
Pennsylvania-----	1,133	436	357	187	153
Rhode Island-----	132	44	46	20	22
South Carolina-----	155	18	74	39	25
South Dakota-----	94	14	34	28	18
Tennessee-----	292	36	114	73	68
Texas-----	740	61	230	147	302
Utah-----	74	5	30	7	33
Vermont-----	38	9	14	10	5
Virginia-----	272	15	124	67	65
Washington-----	356	63	116	106	72
West Virginia-----	147	25	58	46	18
Wisconsin-----	428	83	146	91	108
Wyoming-----	41	9	16	9	7

Table 7. Number and percent distribution of optometrists by number of supplementary personnel of all types used to assist in practice, according to State: United States, 1968—Con.

State	Total optometrists	Number of supplementary personnel of all types			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	21.6	36.4	21.2	20.8
Alabama-----	100.0	5.7	41.5	27.0	25.8
Alaska-----	100.0	-	56.3	18.8	25.0
Arizona-----	100.0	14.8	41.7	25.2	18.3
Arkansas-----	100.0	17.7	42.7	26.5	13.2
California-----	100.0	14.9	37.5	23.7	23.9
Colorado-----	100.0	14.5	32.6	22.7	30.2
Connecticut-----	100.0	29.2	38.4	20.4	12.0
Delaware-----	100.0	26.7	50.0	16.7	6.7
District of Columbia-----	100.0	13.6	25.4	15.3	45.8
Florida-----	100.0	11.8	44.3	28.2	15.7
Georgia-----	100.0	6.4	42.2	26.9	24.5
Hawaii-----	100.0	41.0	32.8	11.5	14.8
Idaho-----	100.0	14.3	42.9	29.9	13.0
Illinois-----	100.0	34.3	28.6	16.7	20.5
Indiana-----	100.0	18.0	37.8	23.4	20.8
Iowa-----	100.0	14.2	40.8	22.8	22.2
Kansas-----	100.0	15.3	40.7	27.3	16.7
Kentucky-----	100.0	16.8	50.5	18.7	14.0
Louisiana-----	100.0	20.7	37.4	23.2	18.7
Maine-----	100.0	27.5	50.5	12.8	9.2
Maryland-----	100.0	14.4	28.1	20.6	36.9
Massachusetts-----	100.0	40.8	38.5	12.4	8.4
Michigan-----	100.0	14.9	32.5	24.5	28.1
Minnesota-----	100.0	18.5	33.6	26.4	21.5
Mississippi-----	100.0	16.7	50.9	25.4	7.0
Missouri-----	100.0	21.8	33.6	22.1	22.6
Montana-----	100.0	22.0	46.3	20.7	11.0
Nebraska-----	100.0	17.8	41.1	21.9	19.2
Nevada-----	100.0	21.2	33.3	27.3	18.2
New Hampshire-----	100.0	19.7	45.5	15.2	19.7
New Jersey-----	100.0	38.9	36.2	15.0	9.9
New Mexico-----	100.0	10.1	49.3	33.3	7.3
New York-----	100.0	28.5	29.2	17.8	24.4
North Carolina-----	100.0	10.5	50.7	27.4	11.5
North Dakota-----	100.0	14.3	46.0	30.2	9.5
Ohio-----	100.0	18.1	40.2	19.8	21.9
Oklahoma-----	100.0	11.4	50.2	26.2	12.2
Oregon-----	100.0	19.2	32.0	24.4	24.4
Pennsylvania-----	100.0	38.4	31.5	16.5	13.5
Rhode Island-----	100.0	33.6	34.5	15.1	16.8
South Carolina-----	100.0	11.7	47.6	24.8	15.9
South Dakota-----	100.0	14.8	36.4	29.6	19.3
Tennessee-----	100.0	12.4	39.3	25.1	23.3
Texas-----	100.0	8.3	31.1	19.9	40.8
Utah-----	100.0	6.4	39.7	9.5	44.4
Vermont-----	100.0	22.9	37.1	25.7	14.3
Virginia-----	100.0	5.7	45.8	24.7	23.9
Washington-----	100.0	17.6	32.4	29.7	20.3
West Virginia-----	100.0	17.3	39.6	30.9	12.2
Wisconsin-----	100.0	19.4	34.1	21.2	25.3
Wyoming-----	100.0	22.2	38.9	22.2	16.7

Table 8. Number and percent distribution of optometrists by number of supplementary personnel used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of supplementary personnel of all types			
		None	1	2	3 or more
United States-----	18,299	3,960	6,655	3,883	3,801
<u>Geographic region</u>					
Northeast-----	4,721	1,615	1,589	767	750
North Central-----	5,838	1,290	2,022	1,243	1,284
South-----	4,107	478	1,698	998	933
West-----	3,633	577	1,347	875	834
<u>Geographic division</u>					
New England-----	1,327	465	523	196	143
Middle Atlantic-----	3,394	1,150	1,055	571	608
East North Central-----	4,168	996	1,396	832	943
West North Central-----	1,670	294	625	411	341
South Atlantic-----	1,929	212	832	501	385
East South Central-----	820	105	366	195	155
West South Central-----	1,358	161	500	303	393
Mountain-----	709	106	284	168	152
Pacific-----	2,924	471	1,064	707	682
<u>Standard Federal Administrative Region</u>					
Region I-----	1,327	465	523	196	143
Region II-----	2,261	715	708	384	454
Region III-----	1,834	521	625	352	336
Region IV-----	2,049	231	930	530	357
Region V-----	4,521	1,062	1,515	925	1,019
Region VI-----	1,429	169	535	327	398
Region VII-----	1,151	204	439	268	240
Region VIII-----	556	84	214	126	131
Region IX-----	2,448	384	918	575	570
Region X-----	725	176	247	199	152
<u>Age of optometrist</u>					
Under 25 years-----	62	19	16	5	22
25-34 years-----	2,004	267	695	493	549
35-44 years-----	5,400	838	1,984	1,333	1,245
45-54 years-----	6,632	1,395	2,472	1,416	1,350
55-64 years-----	2,601	751	985	440	425
65-74 years-----	1,205	481	399	159	166
75 years and over-----	396	210	104	37	45
<u>Sex of optometrist</u>					
Male-----	17,912	3,825	6,542	3,820	3,726
Female-----	387	136	114	63	75
<u>Number of States licensed in</u>					
No States-----	20	3	5	7	4
1 State-----	13,920	3,206	5,162	2,804	2,749
2 States-----	3,355	587	1,191	814	763
3 States or more-----	1,005	164	297	258	285
<u>Hours per week usually worked</u>					
1-34 hours-----	2,153	949	727	317	260
35-39 hours-----	2,897	586	1,322	592	397
40 hours-----	4,218	837	1,562	910	909
41-44 hours-----	2,330	457	831	508	534
45-48 hours-----	3,431	660	1,212	754	805
49 hours or more-----	3,269	571	1,001	802	895

Table 8. Number and percent distribution of optometrists by number of supplementary personnel used to assist in practice, according geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of supplementary personnel of all types			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	21.6	36.4	21.2	20.8
<u>Geographic region</u>					
Northeast-----	100.0	34.2	33.7	16.2	15.9
North Central-----	100.0	22.1	34.6	21.3	22.0
South-----	100.0	11.6	41.3	24.3	22.7
West-----	100.0	15.9	37.1	24.1	23.0
<u>Geographic division</u>					
New England-----	100.0	35.0	39.4	14.8	10.8
Middle Atlantic-----	100.0	33.9	31.4	16.8	17.9
East North Central-----	100.0	23.9	33.5	20.0	22.6
West North Central-----	100.0	17.6	37.4	24.6	20.4
South Atlantic-----	100.0	11.0	43.1	26.0	20.0
East South Central-----	100.0	12.8	44.6	23.8	18.9
West South Central-----	100.0	11.9	36.8	22.3	29.0
Mountain-----	100.0	15.0	40.0	23.7	21.4
Pacific-----	100.0	16.1	36.4	24.2	23.3
<u>Standard Federal Administrative Region</u>					
Region I-----	100.0	35.0	39.4	14.8	10.8
Region II-----	100.0	31.6	31.3	17.0	20.1
Region III-----	100.0	28.4	34.1	19.2	18.3
Region IV-----	100.0	11.3	45.4	25.9	17.4
Region V-----	100.0	23.5	33.5	20.5	22.5
Region VI-----	100.0	11.8	37.5	22.9	27.9
Region VII-----	100.0	17.7	38.1	23.3	20.8
Region VIII-----	100.0	15.2	38.6	22.7	23.5
Region IX-----	100.0	15.7	37.5	23.5	23.3
Region X-----	100.0	17.4	34.1	27.5	21.0
<u>Age of optometrist</u>					
Under 25 years-----	100.0	30.0	26.1	8.7	35.2
25-34 years-----	100.0	13.4	34.7	24.6	27.4
35-44 years-----	100.0	15.5	36.7	24.7	23.1
45-54 years-----	100.0	21.0	37.3	21.3	20.4
55-64 years-----	100.0	28.9	37.9	16.9	16.3
65-74 years-----	100.0	39.9	33.1	13.2	13.8
75 years and over-----	100.0	53.0	26.3	9.4	11.3
<u>Sex of optometrist</u>					
Male-----	100.0	21.4	36.5	21.3	20.8
Female-----	100.0	35.1	29.3	16.4	19.3
<u>Number of States licensed in</u>					
No States-----	100.0	16.6	27.3	33.8	22.4
1 State-----	100.0	23.0	37.1	20.1	19.8
2 States-----	100.0	17.5	35.5	24.3	22.7
3 States or more-----	100.0	16.3	29.6	25.7	28.4
<u>Hours per week usually worked</u>					
1-34 hours-----	100.0	39.4	33.8	14.7	12.1
35-39 hours-----	100.0	20.2	45.6	20.4	13.7
40 hours-----	100.0	19.9	37.0	21.6	21.6
41-44 hours-----	100.0	19.6	35.7	21.8	22.9
45-48 hours-----	100.0	19.2	35.3	22.0	23.5
49 hours or more-----	100.0	17.5	30.6	24.5	27.4

Table 9. Number and percent distribution of optometrists by number of supplementary personnel used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of supplementary personnel of all types			
		None	1	2	3 or more
United States-----	18,299	3,960	6,655	3,883	3,801
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	13,510	3,523	5,799	2,785	1,403
Partnership-----	2,178	155	494	565	963
Group practice-----	530	20	61	120	330
Employed by:					
Optometrists-----	951	100	157	203	491
Ophthalmologists or other physicians-----	171	19	14	28	110
Profit-making firms-----	636	84	78	131	344
Nonprofit organizations (including government)-----	183	32	24	31	96
Other-----	140	27	29	21	64
<u>Number of office locations</u>					
1 office-----	15,083	3,388	5,779	3,149	2,767
2 offices-----	2,806	510	802	677	818
3 offices or more-----	410	62	74	57	216
<u>Number of patient visits per week</u>					
Less than 25 visits-----	1,578	910	408	132	129
25-49 visits-----	3,762	1,352	1,511	543	356
50-74 visits-----	4,989	1,000	2,134	1,051	803
75-99 visits-----	2,750	278	1,132	720	620
100 visits or more-----	5,221	420	1,470	1,437	1,894
<u>Number of patients seen per week</u>					
Less than 25 patients-----	4,086	1,812	1,459	491	325
25-49 patients-----	6,886	1,447	2,912	1,498	1,028
50-74 patients-----	3,719	459	1,368	942	952
75-99 patients-----	1,726	142	525	464	596
100 patients or more-----	1,881	101	392	489	900
<u>Number of optometric services rendered</u>					
1-3 services-----	900	402	210	95	193
4-6 services-----	4,075	1,427	1,268	588	792
7-9 services-----	7,344	1,465	3,067	1,540	1,272
10 services or more-----	5,980	666	2,111	1,660	1,544
<u>Type of optometric service</u>					
Refractions-----	18,238	3,947	6,638	3,871	3,783
Visual field examination-----	13,780	2,567	5,253	3,145	2,816
Tonometry-----	12,093	1,707	4,681	2,996	2,714
Aniseikonic testing-----	1,528	247	510	385	387
Biomicroscopy-----	5,907	536	1,991	1,673	1,707
Contact lens fitting-----	16,928	3,388	6,271	3,695	3,575
Visual training (orthoptics)-----	14,521	2,432	5,432	3,421	3,235
Developmental vision-----	9,128	1,646	3,470	2,182	1,829
Prescribing low vision aids-----	5,225	757	1,960	1,367	1,142
Visual readiness for reading-----	7,450	1,149	2,710	1,860	1,731
Dilensing and adjusting eyewear-----	4,735	728	1,739	1,190	1,078
Frame repairs-----	17,122	3,580	6,366	3,725	3,451
Fabrication of eyewear-----	15,532	3,144	5,803	3,449	3,136
Other-----	6,610	1,213	2,212	1,483	1,702
	718	98	218	186	217

Table 9. Number and percent distribution of optometrists by number of supplementary personnel used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of supplementary personnel of all types			
		None	1	2	3 or more
United States-----	100.0	21.6	36.4	21.2	20.8
Percent distribution					
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	100.0	26.1	42.9	20.6	10.4
Partnership-----	100.0	7.1	22.7	25.9	44.2
Group practice-----	100.0	3.7	11.4	22.6	62.3
Employed by:					
Optometrists-----	100.0	10.6	16.5	21.4	51.6
Ophthalmologists or other physicians-----	100.0	11.1	8.4	16.1	64.3
Profit-making firms-----	100.0	13.1	12.2	20.6	54.0
Nonprofit organizations (including government)-----	100.0	17.5	13.1	16.8	52.6
Other-----	100.0	19.0	20.5	14.8	45.7
<u>Number of office locations</u>					
1 office-----	100.0	22.5	38.3	20.9	18.3
2 offices-----	100.0	18.2	28.6	24.1	29.1
3 offices or more-----	100.0	15.2	18.0	14.0	52.8
<u>Number of patient visits per week</u>					
Less than 25 visits-----	100.0	57.6	25.8	8.4	8.2
25-49 visits-----	100.0	35.9	40.2	14.4	9.5
50-74 visits-----	100.0	20.1	42.8	21.1	16.1
75-99 visits-----	100.0	10.1	41.2	26.2	22.5
100 visits or more-----	100.0	8.1	28.2	27.5	36.3
<u>Number of patients seen per week</u>					
Less than 25 patients-----	100.0	44.3	35.7	12.0	8.0
25-49 patients-----	100.0	21.0	42.3	21.8	14.9
50-74 patients-----	100.0	12.3	36.8	25.3	25.6
75-99 patients-----	100.0	8.2	30.4	26.9	34.5
100 patients or more-----	100.0	5.4	20.8	26.0	47.8
<u>Number of optometric services rendered</u>					
1-3 services-----	100.0	44.7	23.3	10.6	21.4
4-6 services-----	100.0	35.0	31.1	14.4	19.4
7-9 services-----	100.0	20.0	41.8	21.0	17.3
10 services or more-----	100.0	11.1	35.3	27.8	25.8
<u>Type of optometric service</u>					
Refractions-----	100.0	21.6	36.4	21.2	20.7
Visual field examination-----	100.0	18.6	38.1	22.8	20.4
Tonometry-----	100.0	14.1	38.7	24.8	22.4
Aniseikonic testing-----	100.0	16.2	33.4	25.2	25.3
Biomicroscopy-----	100.0	9.1	33.7	28.3	28.9
Ophthalmoscopy-----	100.0	20.0	37.0	21.8	21.1
Contact lens fitting-----	100.0	16.8	37.4	23.6	22.3
Visual training (orthoptics)-----	100.0	18.0	38.0	23.9	20.0
Developmental vision-----	100.0	14.5	37.5	26.2	21.9
Prescribing low vision aids-----	100.0	15.4	36.4	25.0	23.2
Visual readiness for reading-----	100.0	15.4	36.7	25.1	22.8
Dispensing and adjusting eyewear-----	100.0	20.9	37.2	21.8	20.2
Frame repairs-----	100.0	20.3	37.4	22.2	20.2
Fabrication of eyewear-----	100.0	18.4	33.5	22.4	25.8
Other-----	100.0	13.6	30.3	25.8	30.3

Table 10. Number and percent distribution of optometrists by number of secretaries and/or receptionists used to assist in practice, according to State: United States, 1968

State	Total optometrists	Number of secretaries and/or receptionists			
		None	1	2	3 or more
United States-----	18,299	6,255	7,930	2,797	1,318
Alabama-----	180	33	96	34	17
Alaska-----	17	3	12	1	1
Arizona-----	127	32	65	20	10
Arkansas-----	151	43	75	26	7
California-----	2,222	669	932	401	220
Colorado-----	186	56	81	29	19
Connecticut-----	258	96	114	37	10
Delaware-----	35	14	17	5	-
District of Columbia-----	71	19	28	12	12
Florida-----	493	123	280	75	15
Georgia-----	261	51	143	50	17
Hawaii-----	64	35	19	6	4
Idaho-----	86	30	38	18	-
Illinois-----	1,602	698	554	227	122
Indiana-----	503	163	246	66	28
Iowa-----	336	106	157	45	28
Kansas-----	229	67	125	31	6
Kentucky-----	229	72	117	34	6
Louisiana-----	222	74	102	25	21
Maine-----	116	39	61	13	2
Maryland-----	174	46	62	43	24
Massachusetts-----	714	365	269	53	26
Michigan-----	708	203	288	146	71
Minnesota-----	353	127	134	64	28
Mississippi-----	120	40	61	17	2
Missouri-----	431	145	183	64	40
Montana-----	89	38	43	5	2
Nebraska-----	155	52	69	27	7
Nevada-----	36	13	20	1	2
New Hampshire-----	70	17	35	11	7
New Jersey-----	674	323	255	73	22
New Mexico-----	71	19	42	10	-
New York-----	1,587	619	645	198	124
North Carolina-----	320	80	189	44	6
North Dakota-----	72	16	43	8	6
Ohio-----	927	291	422	139	75
Oklahoma-----	245	71	124	41	10
Oregon-----	265	83	111	47	24
Pennsylvania-----	1,133	533	405	141	54
Rhode Island-----	132	58	50	16	9
South Carolina-----	155	40	83	25	7
South Dakota-----	94	27	39	21	7
Tennessee-----	292	81	135	52	24
Texas-----	740	137	367	155	81
Utah-----	74	14	33	13	14
Vermont-----	38	13	16	4	4
Virginia-----	272	54	142	59	17
Washington-----	356	121	136	76	24
West Virginia-----	147	42	74	24	6
Wisconsin-----	428	153	171	60	43
Wyoming-----	41	12	21	5	2

Table 10. Number and percent distribution of optometrists by number of secretaries and/or receptionists used to assist in practice, according to State: United States, 1968—Con.

State	Total optometrists	Number of secretaries and/or receptionists			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	34.2	43.3	15.3	7.2
Alabama-----	100.0	18.2	53.5	18.9	9.4
Alaska-----	100.0	18.8	68.8	6.3	6.3
Arizona-----	100.0	25.2	51.3	15.7	7.8
Arkansas-----	100.0	28.7	50.0	16.9	4.4
California-----	100.0	30.1	42.0	18.0	9.9
Colorado-----	100.0	30.2	43.6	15.7	10.5
Connecticut-----	100.0	37.2	44.4	14.4	4.0
Delaware-----	100.0	40.0	46.7	13.3	-
District of Columbia-----	100.0	27.1	39.0	17.0	17.0
Florida-----	100.0	25.0	56.8	15.3	3.0
Georgia-----	100.0	19.7	54.6	19.3	6.4
Hawaii-----	100.0	54.1	29.5	9.8	6.6
Idaho-----	100.0	35.1	44.2	20.8	-
Illinois-----	100.0	43.6	34.6	14.2	7.6
Indiana-----	100.0	32.4	48.9	13.1	5.6
Iowa-----	100.0	31.5	46.6	13.5	8.4
Kansas-----	100.0	29.2	54.6	13.4	2.8
Kentucky-----	100.0	31.3	50.9	15.0	2.8
Louisiana-----	100.0	33.3	46.0	11.1	9.6
Maine-----	100.0	33.9	53.2	11.0	1.8
Maryland-----	100.0	26.3	35.6	24.4	13.8
Massachusetts-----	100.0	51.2	37.7	7.5	3.7
Michigan-----	100.0	28.7	40.7	20.6	10.1
Minnesota-----	100.0	36.1	37.9	18.2	7.9
Mississippi-----	100.0	33.3	50.9	14.0	1.8
Missouri-----	100.0	33.6	42.4	14.8	9.3
Montana-----	100.0	42.7	48.8	6.1	2.4
Nebraska-----	100.0	33.6	44.5	17.1	4.8
Nevada-----	100.0	36.4	54.6	3.0	6.1
New Hampshire-----	100.0	24.2	50.0	15.2	10.6
New Jersey-----	100.0	47.9	37.9	10.8	3.3
New Mexico-----	100.0	26.1	59.4	14.5	-
New York-----	100.0	39.0	40.7	12.5	7.8
North Carolina-----	100.0	25.0	59.1	13.9	2.0
North Dakota-----	100.0	22.2	58.7	11.1	7.9
Ohio-----	100.0	31.4	45.5	15.0	8.1
Oklahoma-----	100.0	28.8	50.7	16.6	3.9
Oregon-----	100.0	31.2	42.0	17.6	9.2
Pennsylvania-----	100.0	47.0	35.8	12.5	4.8
Rhode Island-----	100.0	43.7	37.8	11.8	6.7
South Carolina-----	100.0	25.5	53.8	15.9	4.8
South Dakota-----	100.0	28.4	40.9	22.7	8.0
Tennessee-----	100.0	27.6	46.2	17.8	8.4
Texas-----	100.0	18.6	49.6	20.9	10.9
Utah-----	100.0	19.1	44.4	17.5	19.1
Vermont-----	100.0	34.3	42.9	11.4	11.4
Virginia-----	100.0	19.8	52.2	21.9	6.1
Washington-----	100.0	33.9	38.2	21.2	6.7
West Virginia-----	100.0	28.8	50.4	16.6	4.3
Wisconsin-----	100.0	35.9	39.9	14.1	10.1
Wyoming-----	100.0	30.6	52.8	11.1	5.6

Table 11. Number and percent distribution of optometrists by number of secretaries and/or receptionists used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of secretaries and/or receptionists			
		None	1	2	3 or more
United States-----	18,299	6,255	7,930	2,797	1,318
Geographic region					
Northeast-----	4,721	2,063	1,852	546	259
North Central-----	5,838	2,048	2,429	899	462
South-----	4,107	1,020	2,095	720	273
West-----	3,633	1,124	1,554	631	324
Geographic division					
New England-----	1,327	588	546	134	59
Middle Atlantic-----	3,394	1,475	1,306	413	200
East North Central-----	4,168	1,509	1,681	639	339
West North Central-----	1,670	539	748	260	123
South Atlantic-----	1,929	470	1,018	338	105
East South Central-----	820	225	408	137	50
West South Central-----	1,358	325	669	246	118
Mountain-----	709	214	344	101	50
Pacific-----	2,924	910	1,210	530	274
Standard Federal Administrative Region					
Region I-----	1,327	588	546	134	59
Region II-----	2,261	942	901	272	146
Region III-----	1,834	709	728	284	113
Region IV-----	2,049	519	1,103	331	95
Region V-----	4,521	1,636	1,815	703	367
Region VI-----	1,429	344	711	256	118
Region VII-----	1,151	369	533	166	82
Region VIII-----	556	163	260	82	51
Region IX-----	2,448	748	1,035	428	237
Region X-----	725	237	297	141	49
Age of optometrist					
Under 25 years-----	62	28	20	8	7
25-34 years-----	2,004	575	834	374	221
35-44 years-----	5,400	1,642	2,415	931	412
45-54 years-----	6,632	2,182	2,960	1,019	471
55-64 years-----	2,601	988	1,149	334	130
65-74 years-----	1,205	592	448	103	61
75 years and over-----	396	248	104	27	16
Sex of optometrist					
Male-----	17,912	6,064	7,805	2,756	1,287
Female-----	387	191	125	40	31
Number of States licensed in					
No States-----	20	3	12	3	1
1 State-----	13,920	4,888	6,052	2,023	957
2 States-----	3,355	1,076	1,442	581	256
3 States or more-----	1,005	288	423	189	104
Hours per week usually worked					
1-34 hours-----	2,153	1,051	808	199	95
35-39 hours-----	2,897	934	1,431	401	131
40 hours-----	4,218	1,342	1,891	646	339
41-44 hours-----	2,330	777	1,007	381	165
45-48 hours-----	3,431	1,111	1,484	563	274
49 hours or more-----	3,269	1,041	1,309	606	314

Table 11. Number and percent distribution of optometrists by number of secretaries and/or receptionists used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of secretaries and/or receptionists			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	34.2	43.3	15.3	7.2
<u>Geographic region</u>					
Northeast-----	100.0	43.7	39.2	11.6	5.5
North Central-----	100.0	35.1	41.6	15.4	7.9
South-----	100.0	24.8	51.0	17.5	6.6
West-----	100.0	31.0	42.8	17.4	8.9
<u>Geographic division</u>					
New England-----	100.0	44.3	41.2	10.1	4.5
Middle Atlantic-----	100.0	43.5	38.5	12.2	5.9
East North Central-----	100.0	36.2	40.3	15.3	8.1
West North Central-----	100.0	32.3	44.8	15.6	7.4
South Atlantic-----	100.0	24.3	52.8	17.5	5.4
East South Central-----	100.0	27.4	49.8	16.7	6.1
West South Central-----	100.0	24.0	49.3	18.1	8.7
Mountain-----	100.0	30.2	48.5	14.3	7.1
Pacific-----	100.0	31.1	41.4	18.1	9.4
<u>Standard Federal Administrative Region</u>					
Region I-----	100.0	44.3	41.2	10.1	4.5
Region II-----	100.0	41.7	39.8	12.0	6.5
Region III-----	100.0	38.7	39.7	15.5	6.2
Region IV-----	100.0	25.3	53.8	16.2	4.7
Region V-----	100.0	36.2	40.2	15.6	8.1
Region VI-----	100.0	24.1	49.8	17.9	8.3
Region VII-----	100.0	32.1	46.3	14.5	7.1
Region VIII-----	100.0	29.4	46.7	14.7	9.2
Region IX-----	100.0	30.6	42.3	17.5	9.7
Region X-----	100.0	32.7	41.0	19.5	6.8
<u>Age of optometrist</u>					
Under 25 years-----	100.0	45.6	31.4	12.3	10.7
25-34 years-----	100.0	28.7	41.6	18.7	11.0
35-44 years-----	100.0	30.4	44.7	17.2	7.6
45-54 years-----	100.0	32.9	44.6	15.4	7.1
55-64 years-----	100.0	38.0	44.2	12.9	5.0
65-74 years-----	100.0	49.1	37.2	8.6	5.1
75 years and over-----	100.0	62.8	26.2	6.9	4.2
<u>Sex of optometrist</u>					
Male-----	100.0	33.9	43.6	15.4	7.2
Female-----	100.0	49.4	32.3	10.4	7.9
<u>Number of States licensed in</u>					
No States-----	100.0	16.6	60.9	17.1	5.5
1 State-----	100.0	35.1	43.5	14.5	6.9
2 States-----	100.0	32.1	43.0	17.3	7.6
3 States or more-----	100.0	28.7	42.1	18.8	10.4
<u>Hours per week usually worked</u>					
1-34 hours-----	100.0	48.8	37.6	9.2	4.4
35-39 hours-----	100.0	32.2	49.4	13.9	4.5
40 hours-----	100.0	31.8	44.8	15.3	8.1
41-44 hours-----	100.0	33.3	43.2	16.4	7.1
45-48 hours-----	100.0	32.4	43.2	16.4	8.0
49 hours or more-----	100.0	31.8	40.0	18.5	9.6

Table 12. Number and percent distribution of optometrists by the number of secretaries and/or receptionists they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of secretaries and/or receptionists			
		None	1	2	3 or more
United States-----	18,299	6,255	7,930	2,797	1,318
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	13,510	5,283	6,245	1,674	308
Partnership-----	2,178	419	825	530	403
Group practice-----	530	78	149	143	161
Employed by:					
Optometrists-----	951	195	353	225	178
Ophthalmologists or other physicians-----	171	24	32	41	74
Profit-making firms-----	636	164	227	130	116
Nonprofit organizations (including government)-----	183	50	57	33	44
Other-----	140	42	43	21	34
<u>Number of office locations</u>					
1 office-----	15,083	5,286	6,827	2,160	810
2 offices-----	2,806	856	991	591	368
3 offices or more-----	410	113	111	46	140
<u>Number of patient visits per week</u>					
Less than 25 visits-----	1,578	1,032	406	95	45
25-49 visits-----	3,762	1,776	1,500	361	125
50-74 visits-----	4,989	1,672	2,381	664	271
75-99 visits-----	2,750	649	1,336	537	228
100 visits or more-----	5,221	1,127	2,306	1,140	649
<u>Number of patients seen per week</u>					
Less than 25 patients-----	4,086	2,233	1,405	325	123
25-49 patients-----	6,886	2,338	3,261	975	312
50-74 patients-----	3,719	976	1,753	665	325
75-99 patients-----	1,726	348	754	393	231
100 patients or more-----	1,881	359	756	439	327
<u>Number of supplementary helpers of all types</u>					
None-----	3,960	3,960	-	-	-
1 assistant-----	6,655	1,391	5,264	-	-
2 assistants-----	3,883	580	1,717	1,586	-
3 assistants or more-----	3,801	324	949	1,210	1,318
<u>Number of optometric services rendered</u>					
1-3 services-----	900	477	268	88	67
4-6 services-----	4,075	1,809	1,509	453	304
7-9 services-----	7,344	2,310	3,495	1,077	463
10 services or more-----	5,980	1,659	2,658	1,179	485
<u>Type of optometric service</u>					
Refractions-----	18,238	6,226	7,912	2,792	1,308
Visual field examination-----	13,780	4,390	6,209	2,207	974
Tonometry-----	12,098	3,390	5,625	2,164	918
Aniseikonic testing-----	1,528	448	664	297	119
Biomicroscopy-----	5,907	1,444	2,672	1,212	579
Ophthalmoscopy-----	16,928	5,571	7,464	2,659	1,233
Contact lens fitting-----	14,521	4,353	6,572	2,455	1,141
Visual training (orthoptics)-----	9,128	2,964	4,029	1,519	616
Developmental vision-----	5,225	1,612	2,354	905	354
Prescribing low vision aids-----	7,450	2,168	3,352	1,338	592
Visual readiness for reading-----	4,735	1,480	2,096	832	327
Dispensing and adjusting eyewear-----	17,122	5,781	7,546	2,639	1,156
Frame repairs-----	15,532	5,197	6,860	2,443	1,032
Fabrication of eyewear-----	6,610	2,075	2,849	1,116	569
Other-----	718	219	317	113	69

Table 12. Number and percent distribution of optometrists by the number of secretaries and/or receptionists they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of secretaries and/or receptionists			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	34.2	43.3	15.3	7.2
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	100.0	39.1	46.2	12.4	2.3
Partnership-----	100.0	19.2	37.9	24.4	18.5
Group practice-----	100.0	14.7	28.1	27.0	30.3
Employed by:					
Optometrists-----	100.0	20.5	37.1	23.7	18.8
Ophthalmologists or other physicians-----	100.0	14.3	18.7	23.9	43.1
Profit-making firms-----	100.0	25.8	35.6	20.4	18.2
Nonprofit organizations (including government)-----	100.0	27.2	30.9	17.9	24.0
Other-----	100.0	29.9	30.8	14.9	24.5
<u>Number of office locations</u>					
1 office-----	100.0	35.1	45.3	14.3	5.4
2 offices-----	100.0	30.5	35.3	21.1	13.1
3 offices-----	100.0	27.6	27.1	11.2	34.2
<u>Number of patient visits per week</u>					
Less than 25 visits-----	100.0	65.4	25.8	6.0	2.9
25-49 visits-----	100.0	47.2	39.9	9.6	3.3
50-74 visits-----	100.0	33.5	47.7	13.3	5.4
75-99 visits-----	100.0	23.6	48.6	19.5	8.3
100 visits or more-----	100.0	21.6	44.2	21.8	12.4
<u>Number of patients seen per week</u>					
Less than 25 visits-----	100.0	54.7	34.4	8.0	3.0
25-49 visits-----	100.0	34.0	47.4	14.2	4.5
50-74 visits-----	100.0	26.3	47.1	17.9	8.7
75-99 visits-----	100.0	20.2	43.7	22.8	13.4
100 visits or more-----	100.0	19.1	40.2	23.3	17.4
<u>Number of supplementary helpers of all types</u>					
None-----	100.0	100.0	-	-	-
1 assistant-----	100.0	20.9	79.1	-	-
2 assistants-----	100.0	14.9	44.2	40.9	-
3 assistants or more-----	100.0	8.5	25.0	31.8	34.7
<u>Number of optometric services rendered</u>					
1-3 services-----	100.0	53.0	29.8	9.7	7.5
4-6 services-----	100.0	44.4	37.0	11.1	7.5
7-9 services-----	100.0	31.5	47.6	14.7	6.3
10 services or more-----	100.0	27.7	44.4	19.7	8.1
<u>Type of optometric service</u>					
Refractions-----	100.0	34.1	43.4	15.3	7.2
Visual field examination-----	100.0	31.9	45.1	16.0	7.1
Tonometry-----	100.0	28.0	46.5	17.9	7.6
Aniseikonic testing-----	100.0	29.3	43.5	19.4	7.8
Biomicroscopy-----	100.0	24.5	45.2	20.5	9.8
Ophthalmoscopy-----	100.0	32.9	44.1	15.7	7.3
Contact lens fitting-----	100.0	30.0	45.3	16.9	7.9
Visual training (orthoptics)-----	100.0	32.5	44.1	16.6	6.8
Developmental vision-----	100.0	30.9	45.1	17.3	6.8
Prescribing low vision aids-----	100.0	29.1	45.0	18.0	8.0
Visual readiness for reading-----	100.0	31.3	44.3	17.6	6.9
Dispensing and adjusting eyewear-----	100.0	33.8	44.1	15.4	6.8
Frame repairs-----	100.0	33.5	44.2	15.7	6.6
Fabrication of eyewear-----	100.0	31.4	43.1	16.9	8.6
Other-----	100.0	30.5	44.1	15.8	9.6

Table 13. Number and percent distribution of optometrists by number of general optometric assistants they used to assist in practice, according to State: United States, 1968

State	Total optometrists	Number of general optometric assistants			
		None	1	2	3 or more
United States-----	18,299	14,070	3,011	826	393
Alabama-----	180	138	20	12	9
Alaska-----	17	8	7	1	-
Arizona-----	127	96	25	6	-
Arkansas-----	151	112	34	4	-
California-----	2,222	1,596	458	114	53
Colorado-----	186	135	33	11	6
Connecticut-----	258	218	34	5	-
Delaware-----	35	30	5	-	1
District of Columbia-----	71	58	11	2	-
Florida-----	493	368	95	28	2
Georgia-----	261	190	56	11	5
Hawaii-----	64	53	7	1	3
Idaho-----	86	58	20	3	4
Illinois-----	1,602	1,291	212	57	42
Indiana-----	503	359	104	31	10
Iowa-----	336	229	76	14	17
Kansas-----	229	160	51	15	3
Kentucky-----	229	181	33	5	10
Louisiana-----	222	168	36	16	2
Maine-----	116	103	10	2	1
Maryland-----	174	149	17	3	4
Massachusetts-----	714	635	69	9	1
Michigan-----	708	522	136	28	23
Minnesota-----	353	271	57	18	7
Mississippi-----	120	87	26	4	2
Missouri-----	431	327	68	27	9
Montana-----	89	64	14	10	1
Nebraska-----	155	110	35	6	3
Nevada-----	36	23	10	3	-
New Hampshire-----	70	63	5	2	-
New Jersey-----	674	583	71	12	8
New Mexico-----	71	56	11	4	-
New York-----	1,587	1,332	180	47	29
North Carolina-----	320	219	78	21	2
North Dakota-----	72	54	10	5	3
Ohio-----	927	710	159	41	16
Oklahoma-----	245	175	50	18	1
Oregon-----	265	204	48	7	6
Pennsylvania-----	1,133	952	124	41	16
Rhode Island-----	132	115	13	3	-
South Carolina-----	155	118	25	12	1
South Dakota-----	94	74	14	5	1
Tennessee-----	292	200	57	21	13
Texas-----	740	480	165	62	34
Utah-----	74	58	9	4	4
Vermont-----	38	31	3	2	1
Virginia-----	272	197	51	17	8
Washington-----	356	258	64	22	13
West Virginia-----	147	114	24	5	3
Wisconsin-----	428	309	79	25	15
Wyoming-----	41	29	9	2	-

Table 13. Number and percent distribution of optometrists by number of general optometric assistants they used to assist in practice, according to State: United States, 1968—Con.

State	Total optometrists	Number of general optometric assistants			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	76.9	16.5	4.5	2.1
Alabama-----	100.0	76.7	11.3	6.9	5.0
Alaska-----	100.0	50.0	43.8	6.3	-
Arizona-----	100.0	75.7	20.0	4.4	-
Arkansas-----	100.0	74.3	22.8	2.9	-
California-----	100.0	71.9	20.6	5.2	2.4
Colorado-----	100.0	72.7	18.0	5.8	3.5
Connecticut-----	100.0	84.8	13.2	2.0	-
Delaware-----	100.0	83.3	13.3	-	3.3
District of Columbia-----	100.0	81.4	15.3	3.4	-
Florida-----	100.0	74.6	19.4	5.6	0.4
Georgia-----	100.0	72.7	21.3	4.0	2.0
Hawaii-----	100.0	82.0	11.5	1.6	4.9
Idaho-----	100.0	67.5	23.4	3.9	5.2
Illinois-----	100.0	80.6	13.3	3.6	2.6
Indiana-----	100.0	71.2	20.6	6.2	1.9
Iowa-----	100.0	68.2	22.5	4.2	5.1
Kansas-----	100.0	69.9	22.2	6.5	1.4
Kentucky-----	100.0	79.0	14.5	2.3	4.2
Louisiana-----	100.0	75.8	16.2	7.1	1.0
Maine-----	100.0	89.0	8.3	1.8	0.9
Maryland-----	100.0	85.6	10.0	1.9	2.5
Massachusetts-----	100.0	89.0	9.6	1.2	0.2
Michigan-----	100.0	73.6	19.2	4.0	3.2
Minnesota-----	100.0	76.7	16.1	5.2	2.1
Mississippi-----	100.0	72.8	21.9	3.5	1.8
Missouri-----	100.0	75.9	15.8	6.3	2.0
Montana-----	100.0	72.0	15.9	11.0	1.2
Nebraska-----	100.0	71.2	22.6	4.1	2.1
Nevada-----	100.0	63.6	27.3	9.1	-
New Hampshire-----	100.0	89.4	7.6	2.0	-
New Jersey-----	100.0	86.5	10.5	1.8	1.2
New Mexico-----	100.0	78.3	15.9	5.8	-
New York-----	100.0	83.9	11.4	3.0	1.8
North Carolina-----	100.0	68.6	24.3	6.4	0.7
North Dakota-----	100.0	74.6	14.3	6.4	4.8
Ohio-----	100.0	76.7	17.2	4.4	1.7
Oklahoma-----	100.0	71.6	20.5	7.4	0.4
Oregon-----	100.0	76.8	18.0	2.8	2.4
Pennsylvania-----	100.0	84.0	11.0	3.7	1.4
Rhode Island-----	100.0	87.4	10.1	2.5	-
South Carolina-----	100.0	75.9	15.9	7.6	0.7
South Dakota-----	100.0	78.4	14.8	5.7	1.1
Tennessee-----	100.0	68.7	19.6	7.3	4.4
Texas-----	100.0	64.8	22.2	8.4	4.6
Utah-----	100.0	77.8	12.7	4.8	4.8
Vermont-----	100.0	82.9	8.6	5.7	2.9
Virginia-----	100.0	72.5	18.6	6.1	2.8
Washington-----	100.0	72.4	17.9	6.1	3.6
West Virginia-----	100.0	77.7	16.6	3.6	2.2
Wisconsin-----	100.0	72.2	18.4	5.8	3.5
Wyoming-----	100.0	72.2	22.2	5.6	-

Table 14. Number and percent distribution of optometrists by number of general optometric assistants they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of general optometric assistants			
		None	1	2	3 or more
United States-----	18,299	14,070	3,011	826	393
Number					
<u>Geographic region</u>					
Northeast-----	4,721	4,032	510	124	55
North Central-----	5,838	4,416	1,001	272	150
South-----	4,107	2,984	784	241	98
West-----	3,633	2,637	717	188	91
<u>Geographic division</u>					
New England-----	1,327	1,166	134	24	3
Middle Atlantic-----	3,394	2,866	375	100	52
East North Central-----	4,168	3,191	690	182	105
West North Central-----	1,670	1,225	310	90	44
South Atlantic-----	1,929	1,443	361	98	27
East South Central-----	820	606	137	43	33
West South Central-----	1,358	935	285	100	37
Mountain-----	709	518	133	43	16
Pacific-----	2,924	2,119	584	146	75
<u>Standard Federal Administrative Region</u>					
Region I-----	1,327	1,166	134	24	3
Region II-----	2,261	1,914	251	59	36
Region III-----	1,834	1,500	232	69	32
Region IV-----	2,049	1,501	390	114	44
Region V-----	4,521	3,461	747	200	113
Region VI-----	1,429	991	296	105	37
Region VII-----	1,151	827	230	62	32
Region VIII-----	556	414	90	36	16
Region IX-----	2,448	1,767	500	125	56
Region X-----	725	528	139	33	24
<u>Age of optometrist</u>					
Under 25 years-----	62	41	13	5	3
25-34 years-----	2,004	1,394	420	126	64
35-44 years-----	5,400	3,878	1,072	309	141
45-54 years-----	6,632	5,170	1,039	290	134
55-64 years-----	2,601	2,198	312	59	31
65-74 years-----	1,205	1,042	119	28	15
75 years and over-----	396	347	36	8	4
<u>Sex of optometrist</u>					
Male-----	17,912	13,761	2,957	812	382
Female-----	387	308	53	14	11
<u>Number of States licensed in</u>					
No States-----	20	16	3	-	-
1 State-----	13,920	10,850	2,202	587	280
2 States-----	3,355	2,464	635	174	82
3 States or more-----	1,005	739	170	65	32
<u>Hours per week usually worked</u>					
1-34 hours-----	2,153	1,821	252	59	21
35-39 hours-----	2,897	2,308	458	98	33
40 hours-----	4,218	3,267	698	170	84
41-44 hours-----	2,330	1,736	404	131	59
45-48 hours-----	3,431	2,590	586	158	97
49 hours or more-----	3,269	2,347	612	210	100

Table 14. Number and percent distribution of optometrists by number of general optometric assistants they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968--Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of general optometric assistants			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	76.9	16.5	4.5	2.2
<u>Geographic region</u>					
Northeast-----	100.0	85.4	10.8	2.6	1.2
North Central-----	100.0	75.6	17.1	4.7	2.6
South-----	100.0	72.7	19.1	5.9	2.4
West-----	100.0	72.6	19.7	5.2	2.5
<u>Geographic division</u>					
New England-----	100.0	87.9	10.1	1.8	0.2
Middle Atlantic-----	100.0	84.5	11.1	3.0	1.5
East North Central-----	100.0	76.6	16.6	4.4	2.5
West North Central-----	100.0	73.4	18.6	5.4	2.7
South Atlantic-----	100.0	74.8	18.7	5.1	1.4
East South Central-----	100.0	74.0	16.7	5.3	4.1
West South Central-----	100.0	68.9	21.0	7.4	2.7
Mountain-----	100.0	73.1	18.7	6.0	2.2
Pacific-----	100.0	72.5	20.0	5.0	2.6
<u>Standard Federal Administrative Region</u>					
Region I-----	100.0	87.9	10.1	1.8	0.2
Region II-----	100.0	84.7	11.1	2.6	1.6
Region III-----	100.0	81.8	12.7	3.8	1.8
Region IV-----	100.0	73.3	19.1	5.5	2.2
Region V-----	100.0	76.6	16.5	4.4	2.5
Region VI-----	100.0	69.3	20.8	7.3	2.6
Region VII-----	100.0	71.8	20.0	5.4	2.8
Region VIII-----	100.0	74.4	16.2	6.5	2.8
Region IX-----	100.0	72.2	20.4	5.1	2.3
Region X-----	100.0	72.9	19.2	4.6	3.3
<u>Age of optometrist</u>					
Under 25 years-----	100.0	65.2	20.8	8.7	5.2
25-34 years-----	100.0	69.6	20.9	6.3	3.2
35-44 years-----	100.0	71.8	19.9	5.7	2.6
45-54 years-----	100.0	78.0	15.7	4.4	2.0
55-64 years-----	100.0	84.5	12.0	2.3	1.2
65-74 years-----	100.0	86.5	9.9	2.4	1.3
75 years and over-----	100.0	87.7	9.2	1.9	1.1
<u>Sex of optometrist</u>					
Male-----	100.0	76.8	16.5	4.5	2.1
Female-----	100.0	79.7	13.8	3.7	2.9
<u>Number of States licensed in</u>					
No States-----	100.0	83.2	16.8	-	-
1 State-----	100.0	78.0	15.8	4.2	2.0
2 States-----	100.0	73.5	18.9	5.2	2.4
3 States or more-----	100.0	73.5	16.9	6.4	3.2
<u>Hours per week usually worked</u>					
1-34 hours-----	100.0	84.6	11.7	2.7	1.0
35-39 hours-----	100.0	79.7	15.8	3.4	1.1
40 hours-----	100.0	77.4	16.6	4.0	2.0
41-44 hours-----	100.0	74.5	17.3	5.6	2.5
45-48 hours-----	100.0	75.5	17.1	4.6	2.8
49 hours or more-----	100.0	71.8	18.7	6.4	3.1

Table 15. Number and percent distribution of optometrists by number of general optometric assistants they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of general optometric assistants			
		None	1	2	3 or more
United States-----	18,299	14,070	3,011	826	393
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	13,510	10,735	2,171	477	127
Partnership-----	2,178	1,467	437	166	107
Group practice-----	530	325	106	54	46
Employed by:					
Optometrists-----	951	680	152	63	57
Ophthalmologists or other physicians-----	171	138	25	1	7
Profit-making firms-----	636	481	73	48	35
Nonprofit organizations (including government)-----	183	140	23	10	10
Other-----	140	104	24	8	4
<u>Number of office locations</u>					
1 office-----	15,083	11,659	2,548	635	241
2 offices-----	2,806	2,131	413	162	100
3 offices or more-----	410	280	49	29	52
<u>Number of patient visits per week</u>					
Less than 25 visits-----	1,578	1,412	126	32	9
25-49 visits-----	3,762	3,184	463	84	31
50-74 visits-----	4,989	3,902	803	201	84
75-99 visits-----	2,750	2,045	507	146	51
100 visits or more-----	5,221	3,527	1,111	363	219
<u>Number of patients seen per week</u>					
Less than 25 patients-----	4,086	3,512	454	91	29
25-49 patients-----	6,886	5,448	1,082	261	25
50-74 patients-----	3,719	2,709	719	197	94
75-99 patients-----	1,726	1,233	326	115	53
100 patients or more-----	1,881	1,168	429	162	122
<u>Number of supplementary helpers of all types</u>					
None-----	3,960	3,960	-	-	-
1 assistant-----	6,655	5,504	1,151	-	-
2 assistants-----	3,883	2,522	951	411	-
3 assistants or more-----	3,801	2,084	909	415	393
<u>Number of optometric services rendered</u>					
1-3 services-----	900	793	59	30	19
4-6 services-----	4,075	3,535	351	102	87
7-9 services-----	7,344	5,850	1,122	254	118
10 services or more-----	5,980	3,892	1,479	440	169
<u>Type of optometric service</u>					
Refractions-----	18,238	14,020	3,005	821	392
Visual field examination-----	13,780	10,268	2,544	684	283
Tonometry-----	12,098	8,723	2,440	659	275
Aniseikonic testing-----	1,528	1,062	327	98	41
Biomicroscopy-----	5,907	3,839	1,464	427	177
Ophthalmoscopy-----	16,928	12,853	2,908	796	371
Contact lens fitting-----	14,521	10,766	2,676	736	342
Visual training (orthoptics)-----	9,128	6,565	1,853	512	198
Developmental vision-----	5,225	3,517	1,218	358	132
Prescribing low vision aids-----	7,450	5,317	1,542	401	190
Visual readiness for reading-----	4,735	3,199	1,088	327	121
Dispensing and adjusting eyewear-----	17,122	13,070	1,902	787	362
Frame repairs-----	15,532	11,777	1,693	740	323
Fabrication of eyewear-----	6,610	4,947	1,175	329	159
Other-----	718	454	176	53	36

Table 15. Number and percent distribution of optometrists by number of general optometric assistants they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of general optometric assistants			
		None	1	2	3 or more
United States-----	100.0	76.9	16.5	4.5	2.2
Percent distribution					
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	100.0	79.5	16.1	3.5	0.9
Partnership-----	100.0	67.4	20.1	7.6	4.9
Group practice-----	100.0	61.3	20.0	10.1	8.7
Employed by:					
Optometrists-----	100.0	71.5	16.0	6.6	6.0
Ophthalmologists or other physicians-----	100.0	80.7	14.8	0.6	3.9
Profit-making firms-----	100.0	75.6	11.4	7.5	5.5
Nonprofit organizations (including government)-----	100.0	76.5	12.6	5.5	5.4
Other-----	100.0	74.3	17.2	5.4	3.1
<u>Number of office locations</u>					
1 office-----	100.0	77.3	16.9	4.2	1.6
2 offices-----	100.0	75.9	14.7	5.8	3.6
3 offices or more-----	100.0	68.4	12.0	7.0	12.7
<u>Number of patient visits per week</u>					
Less than 25 visits-----	100.0	89.5	8.0	2.0	0.6
25-49 visits-----	100.0	84.6	12.3	2.2	0.8
50-74 visits-----	100.0	78.2	16.1	4.0	1.7
75-99 visits-----	100.0	74.4	18.5	5.3	1.9
100 visits or more-----	100.0	67.6	21.3	7.0	4.2
<u>Number of patients seen per week</u>					
Less than 25 patients-----	100.0	86.0	11.1	2.2	0.7
25-49 patients-----	100.0	79.1	15.7	3.8	1.4
50-74 patients-----	100.0	72.8	19.3	5.3	2.5
75-99 patients-----	100.0	71.4	18.9	6.7	3.0
100 patients or more-----	100.0	62.1	22.8	8.6	6.5
<u>Number of supplementary helpers of all types</u>					
None-----	100.0	100.0	-	-	-
1 assistant-----	100.0	82.7	17.3	-	-
2 assistants-----	100.0	64.9	24.5	10.6	-
3 assistants or more-----	100.0	54.8	23.9	10.9	10.4
<u>Number of optometric services rendered</u>					
1-3 services-----	100.0	88.1	6.5	3.3	2.1
4-6 services-----	100.0	86.7	8.6	2.5	2.2
7-9 services-----	100.0	79.7	15.3	3.5	1.6
10 services or more-----	100.0	65.1	24.7	7.4	2.8
<u>Type of optometric service</u>					
Refractions-----	100.0	76.9	16.5	4.5	2.2
Visual field examination-----	100.0	74.5	18.5	5.0	2.1
Tonometry-----	100.0	72.1	20.2	5.5	2.3
Aniseikonic testing-----	100.0	69.5	21.4	6.4	2.7
Biomicroscopy-----	100.0	65.0	24.8	7.2	3.0
Ophthalmoscopy-----	100.0	75.9	17.2	4.7	2.2
Contact lens fitting-----	100.0	74.1	18.4	5.1	2.4
Visual training (orthoptics)-----	100.0	71.9	20.3	5.6	2.2
Developmental vision-----	100.0	67.3	23.3	6.9	2.5
Prescribing low vision aids-----	100.0	71.4	20.7	5.4	2.6
Visual readiness for reading-----	100.0	67.6	23.0	6.9	2.6
Dispensing and adjusting eyewear-----	100.0	76.3	17.0	4.6	2.1
Frame repairs-----	100.0	75.8	17.3	4.8	2.1
Fabrication of eyewear-----	100.0	74.9	17.8	5.0	2.4
Other-----	100.0	63.1	24.5	7.4	5.0

Table 16. Number and percent distribution of optometrists by number of optometric technicians they used to assist in practice, according to State: United States, 1968

State	Total optometrists	Number of optometric technicians			
		None	1	2	3 or more
United States-----	18,299	17,649	485	104	62
Alabama-----	180	171	6	-	3
Alaska-----	17	17	-	-	-
Arizona-----	127	122	2	1	1
Arkansas-----	151	150	1	-	-
California-----	2,222	2,144	58	14	5
Colorado-----	186	181	4	-	-
Connecticut-----	258	253	2	2	-
Delaware-----	35	35	-	-	-
District of Columbia-----	71	65	6	-	-
Florida-----	493	467	23	2	-
Georgia-----	261	253	7	1	-
Hawaii-----	64	61	-	-	3
Idaho-----	86	83	2	1	-
Illinois-----	1,602	1,540	39	13	9
Indiana-----	503	483	15	1	4
Iowa-----	336	320	13	-	3
Kansas-----	229	218	8	1	1
Kentucky-----	229	226	3	-	-
Louisiana-----	222	213	7	2	-
Maine-----	116	113	2	-	-
Maryland-----	174	162	11	1	-
Massachusetts-----	714	702	11	1	-
Michigan-----	708	678	21	3	6
Minnesota-----	353	348	3	1	1
Mississippi-----	120	116	4	-	-
Missouri-----	431	420	10	-	1
Montana-----	89	87	1	-	-
Nebraska-----	155	152	2	-	1
Nevada-----	36	36	-	-	-
New Hampshire-----	70	69	1	-	-
New Jersey-----	674	664	7	2	1
New Mexico-----	71	67	3	1	-
New York-----	1,587	1,518	50	11	7
North Carolina-----	320	308	12	-	-
North Dakota-----	72	71	-	1	-
Ohio-----	972	903	17	5	1
Oklahoma-----	245	238	7	-	-
Oregon-----	265	254	10	1	-
Pennsylvania-----	1,133	1,099	20	10	4
Rhode Island-----	132	130	2	-	-
South Carolina-----	155	150	5	-	-
South Dakota-----	94	94	-	-	-
Tennessee-----	292	277	13	1	1
Texas-----	740	682	39	15	3
Utah-----	74	70	1	4	-
Vermont-----	38	37	1	-	-
Virginia-----	272	262	8	2	-
Washington-----	356	341	13	1	1
West Virginia-----	147	144	1	1	1
Wisconsin-----	428	415	10	2	1
Wyoming-----	41	40	1	-	-

Table 16. Number and percent distribution of optometrists by number of optometric technicians they used to assist in practice, according to State: United States, 1968—Con.

State	Total optometrists	Number of optometric technicians			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	96.5	2.7	0.6	0.3
Alabama-----	100.0	95.0	3.1	-	1.9
Alaska-----	100.0	100.0	-	-	-
Arizona-----	100.0	96.5	1.7	0.9	0.9
Arkansas-----	100.0	99.3	0.7	-	-
California-----	100.0	96.5	2.6	0.6	0.2
Colorado-----	100.0	97.7	2.3	-	-
Connecticut-----	100.0	98.4	0.8	0.8	-
Delaware-----	100.0	100.0	-	-	-
District of Columbia-----	100.0	91.5	8.5	-	-
Florida-----	100.0	94.8	4.7	0.4	-
Georgia-----	100.0	96.8	2.8	0.4	-
Hawaii-----	100.0	95.1	-	-	4.9
Idaho-----	100.0	96.1	2.6	1.3	-
Illinois-----	100.0	96.2	2.5	0.8	0.6
Indiana-----	100.0	95.9	3.0	0.2	0.9
Iowa-----	100.0	95.2	3.9	-	1.0
Kansas-----	100.0	95.4	3.7	0.5	0.5
Kentucky-----	100.0	98.6	1.4	-	-
Louisiana-----	100.0	96.0	3.0	1.0	-
Maine-----	100.0	98.2	1.8	-	-
Maryland-----	100.0	93.1	6.3	0.6	-
Massachusetts-----	100.0	98.3	1.5	0.2	-
Michigan-----	100.0	95.7	2.9	0.5	0.9
Minnesota-----	100.0	98.5	0.9	0.3	0.3
Mississippi-----	100.0	96.5	3.5	-	-
Missouri-----	100.0	97.5	2.3	-	0.3
Montana-----	100.0	98.8	1.2	-	-
Nebraska-----	100.0	98.0	1.4	-	0.7
Nevada-----	100.0	100.0	-	-	-
New Hampshire-----	100.0	98.5	1.5	-	-
New Jersey-----	100.0	98.5	1.0	0.3	0.2
New Mexico-----	100.0	94.2	4.4	1.5	-
New York-----	100.0	95.7	3.2	0.7	0.4
North Carolina-----	100.0	96.3	3.7	-	-
North Dakota-----	100.0	98.4	-	1.6	-
Ohio-----	100.0	97.5	1.9	0.6	0.1
Oklahoma-----	100.0	96.9	3.1	-	-
Oregon-----	100.0	96.0	3.6	0.4	-
Pennsylvania-----	100.0	96.9	1.8	0.9	0.4
Rhode Island-----	100.0	98.3	1.7	-	-
South Carolina-----	100.0	96.6	3.5	-	-
South Dakota-----	100.0	100.0	-	-	-
Tennessee-----	100.0	94.9	4.4	0.4	0.4
Texas-----	100.0	92.2	5.3	2.1	0.4
Utah-----	100.0	93.7	1.6	4.8	-
Vermont-----	100.0	97.1	2.9	-	-
Virginia-----	100.0	96.4	2.8	0.8	-
Washington-----	100.0	95.8	3.6	0.3	0.3
West Virginia-----	100.0	97.8	0.7	0.7	0.7
Wisconsin-----	100.0	97.0	2.3	0.5	0.3
Wyoming-----	100.0	97.2	2.8	-	-

Table 17. Number and percent distribution of optometrists by number of optometric technicians they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of optometric technicians			
		None	1	2	3 or more
Number					
United States-----	18,299	17,649	485	104	62
<u>Geographic region</u>					
Northeast-----	4,721	4,585	96	27	12
North Central-----	5,838	5,642	138	28	30
South-----	4,107	3,918	154	26	9
West-----	3,633	3,503	96	23	11
<u>Geographic division</u>					
New England-----	1,327	1,304	19	3	-
Middle Atlantic-----	3,394	3,281	77	24	12
East North Central-----	4,168	4,019	102	25	22
West North Central-----	1,670	1,623	36	3	8
South Atlantic-----	1,929	1,847	74	8	1
East South Central-----	820	789	26	1	4
West South Central-----	1,358	1,283	55	18	3
Mountain-----	709	686	15	7	1
Pacific-----	2,924	2,817	81	16	10
<u>Standard Federal Administrative Region</u>					
Region I-----	1,327	1,304	19	3	-
Region II-----	2,261	2,182	57	14	8
Region III-----	1,834	1,768	46	14	6
Region IV-----	2,049	1,967	74	4	4
Region V-----	4,521	4,367	105	26	23
Region VI-----	1,429	1,349	58	19	3
Region VII-----	1,151	1,110	33	1	6
Region VIII-----	556	544	8	5	-
Region IX-----	2,448	2,363	61	15	10
Region X-----	725	696	25	3	1
<u>Age of optometrist</u>					
Under 25 years-----	62	62	-	-	-
25-34 years-----	2,004	1,931	55	11	7
35-44 years-----	5,400	5,215	144	29	12
45-54 years-----	6,632	6,389	175	42	26
55-64 years-----	2,601	2,502	75	13	11
65-74 years-----	1,205	1,163	32	6	4
75 years and over-----	396	388	3	3	1
<u>Sex of optometrist</u>					
Male-----	17,912	17,274	476	103	60
Female-----	387	375	9	1	2
<u>Number of States licensed in</u>					
No States-----	20	16	-	3	-
1 State-----	13,920	13,454	349	70	47
2 States-----	3,355	3,209	108	27	11
3 States or more-----	1,005	970	27	4	3
<u>Hours per week usually worked</u>					
1-34 hours-----	2,153	2,102	37	8	7
35-39 hours-----	2,897	2,819	70	5	2
40 hours-----	4,218	4,080	99	21	18
41-44 hours-----	2,330	2,240	67	17	7
45-48 hours-----	3,431	3,289	98	30	14
49 hours or more-----	3,269	3,118	113	23	14

Table 17. Number and percent distribution of optometrists by number of optometric technicians they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of optometric technicians			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	96.5	2.7	0.6	0.3
<u>Geographic region</u>					
Northeast-----	100.0	97.1	2.0	0.6	0.3
North Central-----	100.0	96.6	2.4	0.5	0.5
South-----	100.0	95.4	3.8	0.6	0.2
West-----	100.0	96.4	2.6	0.6	0.3
<u>Geographic division</u>					
New England-----	100.0	98.3	1.5	0.2	-
Middle Atlantic-----	100.0	96.7	2.3	0.7	0.4
East North Central-----	100.0	96.4	2.5	0.6	0.5
West North Central-----	100.0	97.2	2.2	0.2	0.5
South Atlantic-----	100.0	95.7	3.8	0.4	0.1
East South Central-----	100.0	96.2	3.1	0.1	0.5
West South Central-----	100.0	94.5	4.0	1.3	0.2
Mountain-----	100.0	96.7	2.2	1.0	0.2
Pacific-----	100.0	96.4	2.8	0.6	0.3
<u>Standard Federal Administrative Region</u>					
Region I-----	100.0	98.3	1.5	0.2	-
Region II-----	100.0	96.5	2.5	0.6	0.4
Region III-----	100.0	96.4	2.5	0.8	0.3
Region IV-----	100.0	96.0	3.6	0.2	0.2
Region V-----	100.0	96.6	2.3	0.6	0.5
Region VI-----	100.0	94.4	4.0	1.3	0.2
Region VII-----	100.0	96.5	2.9	0.1	0.6
Region VIII-----	100.0	97.8	1.4	0.8	-
Region IX-----	100.0	96.5	2.5	0.6	0.4
Region X-----	100.0	96.0	3.4	0.5	0.2
<u>Age of optometrist</u>					
Under 25 years-----	100.0	100.0	-	-	-
25-34 years-----	100.0	96.4	2.8	0.6	0.3
35-44 years-----	100.0	96.6	2.7	0.5	0.2
45-54 years-----	100.0	96.3	2.6	0.6	0.4
55-64 years-----	100.0	96.2	2.9	0.5	0.4
65-74 years-----	100.0	96.5	2.6	0.5	0.4
75 years and over-----	100.0	98.0	0.9	0.9	0.3
<u>Sex of optometrist</u>					
Male-----	100.0	96.4	2.7	0.6	0.3
Female-----	100.0	96.9	2.3	0.3	0.6
<u>Number of States licensed in</u>					
No States-----	100.0	83.1	-	16.9	-
1 State-----	100.0	96.7	2.5	0.5	0.3
2 States-----	100.0	95.7	3.2	0.8	0.3
3 States or more-----	100.0	96.5	2.7	0.4	0.3
<u>Hours per week usually worked</u>					
1-34 hours-----	100.0	97.6	1.7	0.4	0.3
35-39 hours-----	100.0	97.3	2.4	0.2	0.1
40 hours-----	100.0	96.7	2.4	0.5	0.4
41-44 hours-----	100.0	96.1	2.9	0.7	0.3
45-48 hours-----	100.0	95.9	2.9	0.9	0.4
49 hours or more-----	100.0	95.4	3.5	0.7	0.4

Table 18. Number and percent distribution of optometrists by number of optometric technicians they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of optometric technicians			
		None	1	2	3 or more
United States-----	18,299	17,649	485	104	62
Principal form of employment					
Self employed:					
Solo practice-----	13,510	13,251	225	21	13
Partnership-----	2,178	1,990	131	39	18
Group practice-----	530	472	36	15	8
Employed by:					
Optometrists-----	951	881	43	18	10
Ophthalmologists or other physicians-----	171	155	13	1	1
Profit-making firms-----	636	600	23	9	4
Nonprofit organizations (including government)-----	183	168	7	2	6
Other-----	140	132	7	-	1
Number of office locations					
1 office-----	15,083	14,583	385	74	42
2 offices-----	2,806	2,675	92	29	10
3 offices or more-----	410	391	8	1	10
Number of patient visits per week					
Less than 25 visits-----	1,578	1,545	23	6	4
25-49 visits-----	3,762	3,692	53	13	4
50-74 visits-----	4,989	4,849	113	19	9
75-99 visits-----	2,750	2,650	75	19	5
100 visits or more-----	5,221	4,913	221	48	39
Number of patients seen per week					
Less than 25 patients-----	4,086	4,022	47	11	5
25-49 patients-----	6,886	6,692	156	24	13
50-74 patients-----	3,719	3,568	109	29	13
75-99 patients-----	1,726	1,632	70	16	9
100 patients or more-----	1,881	1,734	102	24	21
Number of supplementary helpers of all types					
None-----	3,960	3,960	-	-	-
1 assistant-----	6,655	6,633	22	-	-
2 assistants-----	3,883	3,745	132	5	-
3 assistants or more-----	3,801	3,310	330	98	62
Number of optometric services rendered					
1-3 services-----	900	878	12	5	6
4-6 services-----	4,075	3,944	92	27	12
7-9 services-----	7,344	7,140	147	31	26
10 services or more-----	5,980	5,688	233	42	18
Type of optometric service					
Refractions-----	18,238	17,588	485	104	62
Visual field examination-----	13,780	13,277	386	73	44
Tonometry-----	12,098	11,629	361	75	33
Aniseikonic testing-----	1,528	1,438	75	8	8
Biomicroscopy-----	5,907	5,608	242	40	17
Ophthalmoscopy-----	16,928	16,322	455	96	55
Contact lens fitting-----	14,521	13,973	409	85	53
Visual training (orthoptics)-----	9,128	8,785	272	46	25
Developmental vision-----	5,225	5,009	170	32	14
Prescribing low vision aids-----	7,450	7,127	250	49	24
Visual readiness for reading-----	4,735	4,518	169	26	22
Dispensing and adjusting eyewear-----	17,122	16,521	451	97	53
Frame repairs-----	15,532	14,988	411	83	50
Fabrication of eyewear-----	6,610	6,319	222	41	27
Other-----	718	678	25	14	1

Table 18. Number and percent distribution of optometrists by number of optometric technicians they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of optometric technicians			
		None	1	2	3 or more
United States-----	100.0	96.5	2.7	0.6	0.3
Percent distribution					
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	100.0	98.1	1.7	0.2	0.1
Partnership-----	100.0	91.4	6.0	1.8	0.8
Group practice-----	100.0	89.0	6.8	2.7	1.5
Employed by:					
Optometrists-----	100.0	92.6	4.5	1.9	1.1
Ophthalmologists or other physicians-----	100.0	91.0	7.7	0.6	0.6
Profit-making firms-----	100.0	94.2	3.7	1.4	0.7
Nonprofit organizations (including government)-----	100.0	91.7	3.6	1.2	3.5
Other-----	100.0	94.5	4.7	-	0.8
<u>Number of office locations</u>					
1 office-----	100.0	96.7	2.6	0.5	0.3
2 offices-----	100.0	95.3	3.3	1.0	0.4
3 offices or more-----	100.0	95.4	1.9	0.3	2.5
<u>Number of patient visits per week</u>					
Less than 25 visits-----	100.0	97.9	1.5	0.4	0.3
25-49 visits-----	100.0	98.1	1.4	0.4	0.1
50-74 visits-----	100.0	97.2	2.3	0.4	0.2
75-99 visits-----	100.0	96.4	2.7	0.7	0.2
100 visits or more-----	100.0	94.1	4.2	0.9	0.7
<u>Number of patients seen per week</u>					
Less than 25 patients-----	100.0	98.4	1.2	0.3	0.1
25-49 patients-----	100.0	97.2	2.3	0.4	0.2
50-74 patients-----	100.0	95.9	2.9	0.8	0.4
75-99 patients-----	100.0	94.5	4.1	0.9	0.5
100 patients or more-----	100.0	92.2	5.4	1.3	1.1
<u>Number of supplementary helpers of all types</u>					
None-----	100.0	100.0	-	-	-
1 assistant-----	100.0	99.7	0.3	-	-
2 assistants-----	100.0	96.5	3.4	0.1	-
3 assistants or more-----	100.0	87.1	8.7	2.6	1.6
<u>Number of optometric services rendered</u>					
1-3 services-----	100.0	97.5	1.3	0.5	0.6
4-6 services-----	100.0	96.8	2.3	0.7	0.3
7-9 services-----	100.0	97.2	2.0	0.4	0.4
10 services or more-----	100.0	95.1	3.9	0.7	0.3
<u>Type of optometric service</u>					
Refractions-----	100.0	96.4	2.7	0.6	0.3
Visual field examination-----	100.0	96.4	2.8	0.5	0.3
Tonometry-----	100.0	96.1	3.0	0.6	0.3
Anisokonic testing-----	100.0	94.1	4.9	0.5	0.5
Biomicroscopy-----	100.0	94.9	4.1	0.7	0.3
Ophthalmoscopy-----	100.0	96.4	2.7	0.6	0.3
Contact lens fitting-----	100.0	96.2	2.8	0.6	0.4
Visual training (orthoptics)-----	100.0	96.2	3.0	0.5	0.3
Developmental vision-----	100.0	95.9	3.3	0.6	0.3
Prescribing low vision aids-----	100.0	95.7	3.4	0.7	0.3
Visual readiness for reading-----	100.0	95.4	3.6	0.6	0.5
Dispensing and adjusting eyewear-----	100.0	96.5	2.6	0.6	0.3
Frame repairs-----	100.0	96.5	2.7	0.5	0.3
Fabrication of eyewear-----	100.0	95.6	3.4	0.6	0.4
Other-----	100.0	94.4	3.5	2.0	0.2

Table 19. Number and percent distribution of optometrists by number of dispensing opticians they used to assist in practice, according to State: United States, 1968

State	Total optometrists	Number of dispensing opticians			
		None	1	2	3 or more
United States-----	18,299	16,068	1,389	451	391
Alabama-----	180	157	15	2	6
Alaska-----	17	16	1	-	-
Arizona-----	127	112	10	2	2
Arkansas-----	151	143	8	-	-
California-----	2,222	1,960	144	41	77
Colorado-----	186	152	22	4	8
Connecticut-----	258	244	12	1	-
Delaware-----	35	35	-	-	-
District of Columbia-----	71	47	13	4	7
Florida-----	493	428	58	6	-
Georgia-----	261	224	25	4	8
Hawaii-----	64	63	1	-	-
Idaho-----	86	85	1	-	-
Illinois-----	1,602	1,442	96	41	23
Indiana-----	503	433	46	11	13
Iowa-----	336	300	19	10	6
Kansas-----	229	206	20	2	1
Kentucky-----	229	214	11	4	-
Louisiana-----	222	190	16	6	10
Maine-----	116	110	4	1	-
Maryland-----	174	123	19	14	19
Massachusetts-----	714	665	38	8	3
Michigan-----	708	584	84	23	17
Minnesota-----	353	291	36	16	10
Mississippi-----	120	119	1	-	-
Missouri-----	431	373	38	11	10
Montana-----	89	84	4	-	-
Nebraska-----	155	129	17	6	2
Nevada-----	36	33	3	-	-
New Hampshire-----	70	65	3	1	1
New Jersey-----	674	636	28	10	-
New Mexico-----	71	65	5	1	-
New York-----	1,587	1,252	203	66	66
North Carolina-----	320	316	2	1	-
North Dakota-----	72	69	-	3	-
Ohio-----	927	807	62	26	32
Oklahoma-----	245	243	2	-	-
Oregon-----	265	225	24	10	6
Pennsylvania-----	1,133	1,071	47	12	3
Rhode Island-----	132	124	6	2	-
South Carolina-----	155	149	5	1	-
South Dakota-----	94	82	10	1	1
Tennessee-----	292	269	20	1	1
Texas-----	740	518	100	78	44
Utah-----	74	61	7	5	1
Vermont-----	38	38	-	-	-
Virginia-----	272	255	12	2	2
Washington-----	356	312	32	5	6
West Virginia-----	147	143	4	-	-
Wisconsin-----	428	369	46	8	4
Wyoming-----	41	35	6	-	-

Table 19. Number and percent distribution of optometrists by number of dispensing opticians they used to assist in practice, according to State: United States, 1968—Con.

State	Total optometrists	Number of dispensing opticians				
		None	1	2	3 or more	
		Percent distribution				
United States-----	100.0	87.8	7.6	2.5	2.1	
Alabama-----	100.0	87.4	8.2	1.3	3.1	
Alaska-----	100.0	93.8	6.3	-	-	
Arizona-----	100.0	88.7	7.8	1.7	1.7	
Arkansas-----	100.0	94.9	5.2	-	-	
California-----	100.0	88.2	6.5	1.9	3.5	
Colorado-----	100.0	82.0	11.6	2.3	4.1	
Connecticut-----	100.0	94.8	4.8	0.4	-	
Delaware-----	100.0	100.0	-	-	-	
District of Columbia-----	100.0	66.1	18.6	5.1	10.2	
Florida-----	100.0	86.9	11.8	1.3	-	
Georgia-----	100.0	85.5	9.6	1.6	3.2	
Hawaii-----	100.0	98.4	1.6	-	-	
Idaho-----	100.0	98.7	1.3	-	-	
Illinois-----	100.0	90.0	6.0	2.5	1.5	
Indiana-----	100.0	86.1	9.2	2.2	2.6	
Iowa-----	100.0	89.4	5.8	2.9	1.9	
Kansas-----	100.0	89.8	8.8	0.9	0.5	
Kentucky-----	100.0	93.5	4.7	1.9	-	
Louisiana-----	100.0	85.9	7.1	2.5	4.6	
Maine-----	100.0	95.4	3.7	0.9	-	
Maryland-----	100.0	70.6	10.6	8.1	10.6	
Massachusetts-----	100.0	93.1	5.3	1.1	0.5	
Michigan-----	100.0	82.5	11.9	3.2	2.4	
Minnesota-----	100.0	82.4	10.3	4.6	2.7	
Mississippi-----	100.0	99.1	0.9	-	-	
Missouri-----	100.0	86.5	8.8	2.5	2.3	
Montana-----	100.0	95.1	4.9	-	-	
Nebraska-----	100.0	83.6	11.0	4.1	1.4	
Nevada-----	100.0	90.9	9.1	-	-	
New Hampshire-----	100.0	92.4	4.6	1.5	1.5	
New Jersey-----	100.0	94.4	4.1	1.5	-	
New Mexico-----	100.0	93.1	7.3	1.5	-	
New York-----	100.0	78.9	12.8	4.2	4.2	
North Carolina-----	100.0	99.0	0.7	0.3	-	
North Dakota-----	100.0	95.2	-	4.8	-	
Ohio-----	100.0	87.1	6.7	2.8	3.5	
Oklahoma-----	100.0	99.1	0.9	-	-	
Oregon-----	100.0	84.8	9.2	3.6	2.4	
Pennsylvania-----	100.0	94.5	4.2	1.1	0.3	
Rhode Island-----	100.0	94.1	4.2	1.7	-	
South Carolina-----	100.0	95.9	3.5	0.7	-	
South Dakota-----	100.0	87.5	10.2	1.1	1.1	
Tennessee-----	100.0	92.4	6.9	0.4	0.4	
Texas-----	100.0	70.0	13.6	10.6	5.9	
Utah-----	100.0	82.5	9.5	6.4	1.6	
Vermont-----	100.0	100.0	-	-	-	
Virginia-----	100.0	93.9	4.5	0.8	0.8	
Washington-----	100.0	87.6	9.1	1.5	1.8	
West Virginia-----	100.0	97.1	2.9	-	-	
Wisconsin-----	100.0	86.4	10.9	1.8	1.0	
Wyoming-----	100.0	86.1	13.9	-	-	

Table 20. Number and percent distribution of optometrists by number of dispensing opticians they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of dispensing opticians			
		None	1	2	3 or more
United States-----	18,299	16,068	1,389	451	391
Number					
<u>Geographic region</u>					
Northeast-----	4,721	4,205	341	101	74
North Central-----	5,838	5,086	476	157	120
South-----	4,107	3,574	312	124	97
West-----	3,633	3,204	261	68	100
<u>Geographic division</u>					
New England-----	1,327	1,246	63	13	4
Middle Atlantic-----	3,394	2,958	278	88	69
East North Central-----	4,168	3,635	335	107	90
West North Central-----	1,670	1,450	140	50	30
South Atlantic-----	1,929	1,721	139	33	36
East South Central-----	820	759	47	8	7
West South Central-----	1,358	1,094	126	84	54
Mountain-----	709	628	58	12	11
Pacific-----	2,924	2,576	203	56	90
<u>Standard Federal Administrative Region</u>					
Region I-----	1,327	1,246	63	13	4
Region II-----	2,261	1,888	231	76	66
Region III-----	1,834	1,675	95	32	31
Region IV-----	2,049	1,876	138	20	15
Region V-----	4,521	3,926	372	123	99
Region VI-----	1,429	1,159	131	85	54
Region VII-----	1,151	1,008	94	29	19
Region VIII-----	556	484	48	14	10
Region IX-----	2,448	2,168	158	43	79
Region X-----	725	638	59	15	13
<u>Age of optometrist</u>					
Under 25 years-----	62	53	3	2	4
25-34 years-----	2,004	1,696	186	55	68
35-44 years-----	5,400	4,692	454	146	109
45-54 years-----	6,632	5,871	470	147	145
55-64 years-----	2,601	2,302	183	78	36
65-74 years-----	1,205	1,081	75	20	27
75 years and over-----	396	373	20	1	1
<u>Sex of optometrist</u>					
Male-----	17,912	15,735	1,354	440	383
Female-----	387	333	36	11	8
<u>Number of States licensed in</u>					
No States-----	20	18	1	-	1
1 State-----	13,920	12,295	1,023	319	283
2 States-----	3,355	2,928	271	84	71
3 States or more-----	1,005	827	94	48	35
<u>Hours per week usually worked</u>					
1-34 hours-----	2,133	2,015	92	29	18
35-39 hours-----	2,897	2,667	147	44	39
40 hours-----	4,218	3,596	357	132	134
41-44 hours-----	2,330	1,996	205	67	62
45-48 hours-----	3,431	2,953	291	106	82
49 hours or more-----	3,269	2,841	298	74	56

Table 20. Number and percent distribution of optometrists by number of dispensing opticians they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of dispensing opticians			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	87.8	7.6	2.5	2.1
<u>Geographic region</u>					
Northeast-----	100.0	89.1	7.2	2.2	1.6
North Central-----	100.0	87.1	8.2	2.7	2.1
South-----	100.0	87.0	7.6	3.0	2.4
West-----	100.0	88.2	7.2	1.9	2.8
<u>Geographic division</u>					
New England-----	100.0	93.9	4.8	1.0	0.3
Middle Atlantic-----	100.0	87.2	8.2	2.6	2.1
East North Central-----	100.0	87.2	8.1	2.6	2.2
West North Central-----	100.0	86.8	8.4	3.0	1.8
South Atlantic-----	100.0	89.2	7.2	1.7	1.9
East South Central-----	100.0	92.6	5.7	0.9	0.8
West South Central-----	100.0	80.6	9.3	6.2	4.0
Mountain-----	100.0	88.5	8.2	1.7	1.5
Pacific-----	100.0	88.1	6.9	1.9	3.1
<u>Standard Federal Administrative Region</u>					
Region I-----	100.0	93.9	4.8	1.0	0.3
Region II-----	100.0	83.5	10.2	3.4	2.9
Region III-----	100.0	91.3	5.2	1.8	1.7
Region IV-----	100.0	91.6	6.7	1.0	0.7
Region V-----	100.0	86.9	8.2	2.7	2.2
Region VI-----	100.0	81.1	9.2	6.0	3.8
Region VII-----	100.0	87.6	8.2	2.5	1.7
Region VIII-----	100.0	87.1	8.7	2.4	1.8
Region IX-----	100.0	88.6	6.5	1.8	3.2
Region X-----	100.0	88.0	8.1	2.1	1.8
<u>Age of optometrist</u>					
Under 25 years-----	100.0	84.2	5.2	3.6	7.0
25-34 years-----	100.0	84.6	9.3	2.7	3.4
35-44 years-----	100.0	86.9	8.4	2.7	2.0
45-54 years-----	100.0	88.5	7.1	2.2	2.2
55-64 years-----	100.0	88.6	7.0	3.0	1.4
65-74 years-----	100.0	89.7	6.2	1.8	2.3
75 years and over-----	100.0	94.4	5.0	0.3	0.3
<u>Sex of optometrist</u>					
Male-----	100.0	87.9	7.6	2.5	2.1
Female-----	100.0	86.0	9.2	2.9	2.0
<u>Number of States licensed in</u>					
No States-----	100.0	88.5	5.8	-	5.8
1 State-----	100.0	88.3	7.4	2.3	2.0
2 States-----	100.0	87.3	8.1	2.5	2.1
3 States or more-----	100.0	82.3	9.4	4.7	3.5
<u>Hours per week usually worked</u>					
1-34 hours-----	100.0	93.6	4.3	1.3	0.8
35-39 hours-----	100.0	92.1	5.1	1.5	1.4
40 hours-----	100.0	85.2	8.5	3.1	3.2
41-44 hours-----	100.0	85.7	8.8	2.9	2.7
45-48 hours-----	100.0	86.1	8.5	3.1	2.4
49 hours or more-----	100.0	86.9	9.1	2.3	1.7

Table 21. Number and percent distribution of optometrists by number of dispensing opticians they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of dispensing opticians			
		None	1	2	3 or more
United States-----	18,299	16,068	1,389	451	391
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	13,510	12,757	611	99	43
Partnership-----	2,178	1,741	282	88	66
Group practice-----	530	363	86	40	42
Employed by:					
Optometrists-----	951	578	190	101	82
Ophthalmologists or other physicians-----	171	97	31	18	26
Profit-making firms-----	636	311	146	88	91
Nonprofit organizations (including government)-----	183	119	26	11	27
Other-----	140	101	18	7	14
<u>Number of office locations</u>					
1 office-----	15,083	13,366	1,115	350	253
2 offices-----	2,806	2,410	234	81	82
3 offices or more-----	410	292	41	21	56
<u>Number of patient visits per week</u>					
Less than 25 visits-----	1,578	1,504	57	6	11
25-49 visits-----	3,762	3,572	125	37	29
50-74 visits-----	4,989	4,491	339	93	67
75-99 visits-----	2,750	2,386	209	66	89
100 visits or more-----	5,221	4,116	659	249	196
<u>Number of patients seen per week</u>					
Less than 25 patients-----	4,086	3,923	121	16	26
25-49 patients-----	6,886	6,270	441	119	56
50-74 patients-----	3,719	3,144	375	109	91
75-99 patients-----	1,726	1,369	192	67	98
100 patients or more-----	1,881	1,362	260	139	120
<u>Number of supplementary helpers of all types</u>					
None-----	3,960	3,960	-	-	-
1 assistant-----	6,655	6,549	106	-	-
2 assistants-----	3,883	3,431	425	28	-
3 assistants or more-----	3,801	2,128	858	423	391
<u>Number of optometric services rendered</u>					
1-3 services-----	900	731	76	49	44
4-6 services-----	4,075	3,431	337	159	149
7-9 services-----	7,344	6,550	504	159	131
10 services or more-----	5,980	5,356	472	85	68
<u>Type of optometric service</u>					
Refractions-----	18,238	16,014	1,386	450	389
Visual field examination-----	13,780	12,355	958	254	214
Tonometry-----	12,098	10,726	925	254	193
Aniseikonic testing-----	1,528	1,360	125	20	24
Biomicroscopy-----	5,907	5,164	520	121	103
Ophthalmoscopy-----	16,928	14,872	1,284	419	353
Contact lens fitting-----	14,521	12,744	1,126	358	293
Visual training (orthoptics)-----	9,128	8,354	551	118	105
Developmental vision-----	5,225	4,766	348	56	54
Prescribing low vision aids-----	7,450	6,609	576	133	132
Visual readiness for reading-----	4,735	4,307	310	60	58
Dispensing and adjusting eyewear-----	17,122	15,147	1,278	390	307
Frame repairs-----	15,532	13,765	1,168	335	263
Fabrication of eyewear-----	6,610	5,605	690	159	155
Other-----	718	634	55	17	13

Table 21. Number and percent distribution of optometrists by number of dispensing opticians they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of dispensing opticians			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	87.8	7.6	2.5	2.1
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	100.0	94.4	4.5	0.7	0.3
Partnership-----	100.0	80.0	12.9	4.0	3.0
Group practice-----	100.0	68.5	16.1	7.5	7.8
Employed by:					
Optometrists-----	100.0	60.8	19.9	10.7	8.6
Ophthalmologists or other physicians-----	100.0	56.5	17.9	10.3	15.2
Profit-making firms-----	100.0	48.9	23.0	13.8	14.4
Nonprofit organizations (including government)-----	100.0	64.8	14.3	6.0	14.9
Other-----	100.0	72.5	12.7	4.7	10.2
<u>Number of office locations</u>					
1 office-----	100.0	88.6	7.4	2.3	1.7
2 offices-----	100.0	85.9	8.3	2.9	2.9
3 offices or more-----	100.0	71.3	9.9	5.1	13.7
<u>Number of patient visits per week</u>					
Less than 25 visits-----	100.0	95.3	3.6	0.4	0.7
25-49 visits-----	100.0	94.9	3.3	1.0	0.8
50-74 visits-----	100.0	90.0	6.8	1.9	1.3
75-99 visits-----	100.0	86.8	7.6	2.4	3.2
100 visits or more-----	100.0	78.8	12.6	4.8	3.8
<u>Number of patients seen per week</u>					
Less than 25 patients-----	100.0	96.0	3.0	0.4	0.6
25-49 patients-----	100.0	91.1	6.4	1.7	0.8
50-74 patients-----	100.0	84.5	10.1	2.9	2.5
75-99 patients-----	100.0	79.3	11.1	3.9	5.7
100 patients or more-----	100.0	72.4	13.8	7.4	6.4
<u>Number of supplementary helpers of all types</u>					
None-----	100.0	100.0	-	-	-
1 assistant-----	100.0	98.4	1.6	-	-
2 assistants-----	100.0	88.4	10.9	0.7	-
3 assistants or more-----	100.0	56.0	22.6	11.1	10.3
<u>Number of optometric services rendered</u>					
1-3 services-----	100.0	81.3	8.4	5.4	4.9
4-6 services-----	100.0	84.2	8.3	3.9	3.7
7-9 services-----	100.0	89.2	6.9	2.2	1.8
10 services or more-----	100.0	89.6	7.9	1.4	1.1
<u>Type of optometric service</u>					
Refractions-----	100.0	87.8	7.6	2.5	2.1
Visual field examination-----	100.0	89.7	7.0	1.8	1.6
Tonometry-----	100.0	88.7	7.7	2.1	1.6
Aniseikonic testing-----	100.0	89.0	8.2	1.3	1.6
Biometric oscopy-----	100.0	87.4	8.8	2.0	1.7
Ophthalmoscopy-----	100.0	87.9	7.6	2.5	2.1
Contact lens fitting-----	100.0	87.3	7.8	2.5	2.0
Visual training (orthoptics)-----	100.0	91.5	6.0	1.3	1.2
Developmental vision-----	100.0	91.2	6.7	1.1	1.0
Prescribing low vision aids-----	100.0	88.7	7.7	1.8	1.8
Visual readiness for reading-----	100.0	91.0	6.5	1.3	1.2
Dispensing and adjusting eyewear-----	100.0	88.5	7.5	2.3	1.8
Frame repairs-----	100.0	88.6	7.5	2.2	1.7
Fabrication of eyewear-----	100.0	84.8	10.4	2.4	2.4
Other-----	100.0	88.2	7.6	2.3	1.9

Table 22. Number and percent distribution of optometrists by number of contact lens technicians they used to assist in practice, according to State: United States, 1968

State	Total optometrists	Number of contact lens technicians			
		None	1	2	3 or more
United States-----	18,299	17,784	418	61	37
Alabama-----	180	174	5	1	-
Alaska-----	17	17	-	-	-
Arizona-----	127	125	-	-	1
Arkansas-----	151	150	1	-	-
California-----	2,222	2,151	62	5	3
Colorado-----	186	179	5	1	-
Connecticut-----	258	258	-	-	-
Delaware-----	35	35	-	-	-
District of Columbia-----	71	68	4	-	-
Florida-----	493	481	5	1	5
Georgia-----	261	258	3	-	-
Hawaii-----	64	63	1	-	-
Idaho-----	86	86	-	-	-
Illinois-----	1,602	1,531	52	10	8
Indiana-----	503	481	16	3	3
Iowa-----	336	319	15	1	1
Kansas-----	229	224	4	1	-
Kentucky-----	229	228	1	-	-
Louisiana-----	222	216	4	1	-
Maine-----	116	116	-	-	-
Maryland-----	174	168	5	1	-
Massachusetts-----	714	710	3	1	-
Michigan-----	708	692	16	-	-
Minnesota-----	353	335	15	2	1
Mississippi-----	120	120	-	-	-
Missouri-----	431	418	6	4	2
Montana-----	89	89	-	-	-
Nebraska-----	155	151	3	1	-
Nevada-----	36	34	2	-	-
New Hampshire-----	70	70	-	-	-
New Jersey-----	674	665	8	1	-
New Mexico-----	71	71	-	-	-
New York-----	1,587	1,546	35	2	3
North Carolina-----	320	319	1	-	-
North Dakota-----	72	72	-	-	-
Ohio-----	927	898	24	4	1
Oklahoma-----	245	241	3	1	-
Oregon-----	265	262	2	-	1
Pennsylvania-----	1,133	1,104	24	4	1
Rhode Island-----	132	130	2	-	-
South Carolina-----	155	151	4	-	-
South Dakota-----	94	92	1	-	1
Tennessee-----	292	283	6	-	2
Texas-----	740	681	53	5	-
Utah-----	74	71	1	1	1
Vermont-----	38	38	-	-	-
Virginia-----	272	265	6	1	-
Washington-----	356	345	9	3	-
West Virginia-----	147	146	1	-	-
Wisconsin-----	428	419	6	1	1
Wyoming-----	41	41	-	-	-

Table 22. Number and percent distribution of optometrists by number of contact lens technicians they used to assist in practice, according to State: United States, 1968—Con.

State	Total optometrists	Number of contact lens technicians			
		None	1	2	3 or more
		Percent distribution			
United States-----	100.0	97.2	2.3	0.3	0.2
Alabama-----	100.0	96.9	2.5	0.6	-
Alaska-----	100.0	100.0	-	-	-
Arizona-----	100.0	99.1	-	-	0.9
Arkansas-----	100.0	99.3	0.7	-	-
California-----	100.0	96.8	2.8	0.2	0.2
Colorado-----	100.0	96.5	2.9	0.6	-
Connecticut-----	100.0	100.0	-	-	-
Delaware-----	100.0	100.0	-	-	-
District of Columbia-----	100.0	94.9	5.1	-	-
Florida-----	100.0	97.6	1.1	0.2	1.1
Georgia-----	100.0	98.8	1.2	-	-
Hawaii-----	100.0	98.4	1.6	-	-
Idaho-----	100.0	100.0	-	-	-
Illinois-----	100.0	95.6	3.3	0.7	0.5
Indiana-----	100.0	95.5	3.2	0.6	0.6
Iowa-----	100.0	94.9	4.5	0.3	0.3
Kansas-----	100.0	97.7	1.9	0.5	-
Kentucky-----	100.0	99.5	0.5	-	-
Louisiana-----	100.0	97.5	2.0	0.5	-
Maine-----	100.0	100.0	-	-	-
Maryland-----	100.0	96.3	3.1	0.6	-
Massachusetts-----	100.0	99.4	0.5	0.2	-
Michigan-----	100.0	97.7	2.3	-	-
Minnesota-----	100.0	94.9	4.2	0.6	0.3
Mississippi-----	100.0	100.0	-	-	-
Missouri-----	100.0	97.0	1.5	1.0	0.5
Montana-----	100.0	100.0	-	-	-
Nebraska-----	100.0	97.3	2.1	0.7	-
Nevada-----	100.0	93.9	6.1	-	-
New Hampshire-----	100.0	100.0	-	-	-
New Jersey-----	100.0	98.7	1.2	0.2	-
New Mexico-----	100.0	100.0	-	-	-
New York-----	100.0	97.4	2.2	0.1	0.2
North Carolina-----	100.0	99.7	0.3	-	-
North Dakota-----	100.0	100.0	-	-	-
Ohio-----	100.0	96.9	2.5	0.5	0.1
Oklahoma-----	100.0	98.3	1.3	0.4	-
Oregon-----	100.0	98.8	0.8	-	0.4
Pennsylvania-----	100.0	97.4	2.1	0.4	0.1
Rhode Island-----	100.0	98.3	1.7	-	-
South Carolina-----	100.0	97.2	2.8	-	-
South Dakota-----	100.0	97.7	1.1	-	1.1
Tennessee-----	100.0	97.1	2.2	-	0.7
Texas-----	100.0	92.1	7.2	0.7	-
Utah-----	100.0	95.2	1.6	1.6	1.6
Vermont-----	100.0	100.0	-	-	-
Virginia-----	100.0	97.6	2.0	0.4	-
Washington-----	100.0	96.7	2.4	0.9	-
West Virginia-----	100.0	99.3	0.7	-	-
Wisconsin-----	100.0	98.0	1.5	0.3	0.3
Wyoming-----	100.0	100.0	-	-	-

Table 23. Number and percent distribution of optometrists by number of contact lens technicians they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrist	Total optometrists	Number of contact lens technicians			
		None	1	2	3 or more
United States-----	18,299	17,784	418	61	37
Number					
<u>Geographic region</u>					
Northeast-----	4,721	4,635	72	9	5
North Central-----	5,838	5,631	160	29	19
South-----	4,107	3,984	104	12	7
West-----	3,633	3,533	82	11	7
<u>Geographic division</u>					
New England-----	1,327	1,320	5	1	-
Middle Atlantic-----	3,394	3,315	67	8	5
East North Central-----	4,168	4,021	115	19	14
West North Central-----	1,670	1,610	45	10	5
South Atlantic-----	1,929	1,891	29	3	5
East South Central-----	820	805	12	1	2
West South Central-----	1,358	1,288	62	8	-
Mountain-----	709	696	9	2	2
Pacific-----	2,924	2,838	73	9	4
<u>Standard Federal Administrative Region</u>					
Region I-----	1,327	1,320	5	1	-
Region II-----	2,261	2,211	43	3	3
Region III-----	1,834	1,787	39	7	1
Region IV-----	2,049	2,014	26	2	7
Region V-----	4,521	4,356	130	21	15
Region VI-----	1,429	1,359	62	8	-
Region VII-----	1,151	1,111	29	8	3
Region VIII-----	556	544	8	2	2
Region IX-----	2,448	2,374	65	5	4
Region X-----	725	710	11	3	1
<u>Age of optometrist</u>					
Under 25 years-----	62	58	3	-	1
25-34 years-----	2,004	1,932	56	9	8
35-44 years-----	5,400	5,246	131	13	10
45-54 years-----	6,632	6,444	151	24	13
55-64 years-----	2,601	2,541	50	8	2
65-74 years-----	1,205	1,174	23	4	3
75 years and over-----	396	389	4	2	-
<u>Sex of optometrist</u>					
Male-----	17,912	17,415	404	58	35
Female-----	387	369	13	2	2
<u>Number of States licensed in</u>					
No States-----	20	19	1	-	-
1 State-----	13,920	13,545	314	43	18
2 States-----	3,355	3,260	67	14	14
3 States or more-----	1,005	961	35	3	5
<u>Hours per week usually worked</u>					
1-34 hours-----	2,153	2,111	31	7	4
35-39 hours-----	2,897	2,854	39	1	2
40 hours-----	4,218	4,098	98	12	11
41-44 hours-----	2,330	2,256	63	9	3
45-48 hours-----	3,431	3,309	99	16	8
49 hours or more-----	3,269	3,156	88	16	9

Table 23. Number and percent distribution of optometrists by number of contact lens technicians they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of contact lens technicians			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	97.2	2.3	0.3	0.2
<u>Geographic region</u>					
Northeast-----	100.0	98.2	1.5	0.2	0.1
North Central-----	100.0	96.5	2.7	0.5	0.3
South-----	100.0	97.0	2.5	0.3	0.2
West-----	100.0	97.3	2.3	0.3	0.2
<u>Geographic division</u>					
New England-----	100.0	99.5	0.4	0.1	-
Middle Atlantic-----	100.0	97.7	2.0	0.2	0.1
East North Central-----	100.0	96.5	2.8	0.5	0.3
West North Central-----	100.0	96.4	2.7	0.6	0.3
South Atlantic-----	100.0	98.0	1.5	0.2	0.3
East South Central-----	100.0	98.2	1.5	0.1	0.3
West South Central-----	100.0	94.9	4.6	0.6	-
Mountain-----	100.0	98.1	1.2	0.3	0.3
Pacific-----	100.0	97.1	2.5	0.3	0.2
<u>Standard Federal Administrative Region</u>					
Region I-----	100.0	99.5	0.4	0.1	-
Region II-----	100.0	97.8	1.9	0.2	0.2
Region III-----	100.0	97.4	2.1	0.4	0.1
Region IV-----	100.0	98.3	1.3	0.1	0.4
Region V-----	100.0	96.3	2.9	0.5	0.3
Region VI-----	100.0	95.1	4.4	0.5	-
Region VII-----	100.0	96.5	2.5	0.7	0.3
Region VIII-----	100.0	97.8	1.4	0.4	0.4
Region IX-----	100.0	97.0	2.7	0.2	0.2
Region X-----	100.0	97.9	1.5	0.5	0.2
<u>Age of optometrist</u>					
Under 25 years-----	100.0	93.0	5.2	-	1.8
25-34 years-----	100.0	96.4	2.8	0.4	0.4
35-44 years-----	100.0	97.2	2.4	0.2	0.2
45-54 years-----	100.0	97.2	2.3	0.4	0.2
55-64 years-----	100.0	97.7	1.9	0.3	0.1
65-74 years-----	100.0	97.4	1.9	0.4	0.3
75 years and over-----	100.0	98.3	1.1	0.6	-
<u>Sex of optometrist</u>					
Male-----	100.0	97.2	2.3	0.3	0.2
Female-----	100.0	95.4	3.5	0.6	0.6
<u>Number of States licensed in</u>					
No States-----	100.0	94.6	5.4	-	-
1 State-----	100.0	97.3	2.3	0.3	0.1
2 States-----	100.0	97.2	2.0	0.4	0.4
3 States or more-----	100.0	95.6	3.5	0.3	0.5
<u>Hours per week usually worked</u>					
1-34 hours-----	100.0	98.1	1.4	0.3	0.2
35-39 hours-----	100.0	98.5	1.4	0.0	0.1
40 hours-----	100.0	97.1	2.3	0.3	0.3
41-44 hours-----	100.0	96.8	2.7	0.4	0.1
45-48 hours-----	100.0	96.4	2.9	0.5	0.2
49 hours or more-----	100.0	96.5	2.7	0.5	0.3

Table 24. Number and percent distribution of optometrists by number of contact lens technicians they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of optometrist	Total optometrists	Number of contact lens technicians			
		None	1	2	3 or more
United States-----	18,299	17,784	418	61	37
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	13,510	13,342	146	13	9
Partnership-----	2,178	2,082	68	20	7
Group practice-----	530	473	41	10	7
Employed by:					
Optometrists-----	951	864	76	6	6
Ophthalmologists or other physicians-----	171	149	21	1	-
Profit-making firms-----	636	566	53	10	7
Nonprofit organizations (including government)-----	183	175	5	1	2
Other-----	140	132	8	-	-
<u>Number of office locations</u>					
1 office-----	15,083	14,695	322	42	24
2 offices-----	2,806	2,711	75	13	7
3 offices or more-----	410	378	20	6	7
<u>Number of patient visits per week</u>					
Less than 25 visits-----	1,578	1,555	18	2	3
25-49 visits-----	3,762	3,711	39	7	6
50-74 visits-----	4,989	4,881	87	11	10
75-99 visits-----	2,750	2,678	63	5	3
100 visits or more-----	5,221	4,958	212	35	15
<u>Number of patients seen per week</u>					
Less than 25 patients-----	4,086	4,040	36	5	4
25-49 patients-----	6,886	6,762	103	12	9
50-74 patients-----	3,719	3,601	92	12	13
75-99 patients-----	1,726	1,651	66	8	2
100 patients or more-----	1,881	1,730	120	23	9
<u>Number of supplementary helpers of all types</u>					
None-----	3,960	3,960	-	-	-
1 assistant-----	6,655	6,648	8	-	-
2 assistants-----	3,883	3,829	54	-	-
3 assistants or more-----	3,801	3,347	356	61	37
<u>Number of optometric services</u>					
1-3 services-----	900	857	34	5	4
4-6 services-----	4,075	3,931	110	19	16
7-9 services-----	7,344	7,176	145	16	7
10 services or more-----	5,980	5,821	128	21	11
<u>Type of optometric service</u>					
Refractions-----	18,238	17,731	414	58	35
Visual field examination-----	13,780	13,442	285	35	19
Tonometry-----	12,098	11,776	264	39	18
Aniseikonic testing-----	1,528	1,462	55	8	4
Biomicroscopy-----	5,907	5,681	181	31	15
Ophthalmoscopy-----	16,928	16,462	377	57	32
Contact lens fitting-----	14,521	14,056	370	59	35
Visual training (orthoptics)-----	9,128	8,930	170	21	6
Developmental vision-----	5,225	5,116	93	11	5
Prescribing low vision aids-----	7,450	7,241	172	23	14
Visual readiness for reading-----	4,735	4,635	78	15	7
Dispensing and adjusting eyewear-----	17,122	16,700	345	46	30
Frame repairs-----	15,532	15,161	307	38	25
Fabrication of eyewear-----	6,610	6,414	158	22	15
Other-----	718	680	29	7	3

Table 24. Number and percent distribution of optometrists by number of contact lens technicians they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of optometrist	Total optometrists	Number of contact lens technicians			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	97.2	2.3	0.3	0.2
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	100.0	98.8	1.1	0.1	0.1
Partnership-----	100.0	95.6	3.1	0.9	0.3
Group practice-----	100.0	89.3	7.7	1.8	1.2
Employed by:					
Optometrists-----	100.0	90.9	8.0	0.6	0.6
Ophthalmologists or other physicians-----	100.0	87.2	12.2	0.6	-
Profit-making firms-----	100.0	89.0	8.3	1.6	1.1
Nonprofit organizations (including government)-----	100.0	95.2	2.9	0.6	1.3
Other-----	100.0	94.6	5.4	-	-
<u>Number of office locations</u>					
1 office-----	100.0	97.4	2.1	0.3	0.2
2 offices-----	100.0	96.6	2.7	0.5	0.2
3 offices or more-----	100.0	92.2	4.8	1.4	1.6
<u>Number of patient visits per week</u>					
Less than 25 visits-----	100.0	98.5	1.1	0.1	0.2
25-49 visits-----	100.0	98.7	1.0	0.2	0.2
50-74 visits-----	100.0	97.8	1.7	0.2	0.2
75-99 visits-----	100.0	97.4	2.3	0.2	0.1
100 visits or more-----	100.0	95.0	4.1	0.7	0.3
<u>Number of patients seen per week</u>					
Less than 25 patients-----	100.0	98.9	0.9	0.1	0.1
25-49 patients-----	100.0	98.2	1.5	0.2	0.1
50-74 patients-----	100.0	96.8	2.5	0.3	0.4
75-99 patients-----	100.0	95.6	3.8	0.4	0.1
100 patients or more-----	100.0	91.9	6.4	1.2	0.5
<u>Number of supplementary helpers of all types</u>					
None-----	100.0	100.0	-	-	-
1 assistant-----	100.0	99.9	0.1	-	-
2 assistants-----	100.0	98.6	1.4	-	-
3 assistants or more-----	100.0	88.1	9.4	1.6	1.0
<u>Number of optometric services rendered</u>					
1-3 services-----	100.0	95.2	3.8	0.5	0.5
4-6 services-----	100.0	96.5	2.7	0.5	0.4
7-9 services-----	100.0	97.7	2.0	0.2	0.1
10 services or more-----	100.0	97.3	2.1	0.4	0.2
<u>Type of optometric service</u>					
Refractions-----	100.0	97.2	2.3	0.3	0.2
Visual field examination-----	100.0	97.5	2.1	0.3	0.1
Tonometry-----	100.0	97.3	2.2	0.3	0.2
Aniseikonic testing-----	100.0	95.6	3.6	0.5	0.3
Biomicroscopy-----	100.0	96.2	3.1	0.5	0.3
Ophthalmoscopy-----	100.0	97.3	2.2	0.3	0.2
Contact lens fitting-----	100.0	96.8	2.6	0.4	0.2
Visual training (orthoptics)-----	100.0	97.8	1.9	0.2	0.1
Developmental vision-----	100.0	97.9	1.8	0.2	0.1
Prescribing low vision aids-----	100.0	97.2	2.3	0.3	0.2
Visual readiness for reading-----	100.0	97.9	1.7	0.3	0.1
Dispensing and adjusting eyewear-----	100.0	97.5	2.0	0.3	0.2
Frame repairs-----	100.0	97.6	2.0	0.3	0.2
Fabrication of eyewear-----	100.0	97.0	2.4	0.3	0.2
Other-----	100.0	94.6	4.0	0.9	0.5

Table 25. Number and percent distribution of optometrists by number of optical technicians (shopmen) they used to assist in practice, according to State: United States, 1968

State	Total optometrists	Number of optical technicians (shopmen)				
		None	1	2	3 or more	
		Number				
United States-----	18,299	16,825	981	249	245	
Alabama-----	180	165	9	1	5	
Alaska-----	17	16	1	-	-	
Arizona-----	127	118	7	2	-	
Arkansas-----	151	143	6	2	-	
California-----	2,222	2,089	87	19	26	
Colorado-----	186	167	15	3	-	
Connecticut-----	258	235	21	-	2	
Delaware-----	35	34	1	-	-	
District of Columbia-----	71	54	11	5	1	
Florida-----	493	457	32	3	1	
Georgia-----	261	235	22	4	-	
Hawaii-----	64	64	-	-	-	
Idaho-----	86	85	-	-	1	
Illinois-----	1,602	1,474	67	22	38	
Indiana-----	503	456	29	6	12	
Iowa-----	336	320	11	-	5	
Kansas-----	229	226	-	2	1	
Kentucky-----	229	213	10	6	-	
Louisiana-----	222	200	7	2	12	
Maine-----	116	111	3	1	-	
Maryland-----	174	144	14	3	13	
Massachusetts-----	714	689	21	1	3	
Michigan-----	708	646	45	3	14	
Minnesota-----	353	338	12	1	2	
Mississippi-----	120	120	-	-	-	
Missouri-----	431	390	23	9	10	
Montana-----	89	85	3	-	-	
Nebraska-----	155	147	7	-	-	
Nevada-----	36	33	3	-	-	
New Hampshire-----	70	67	-	2	1	
New Jersey-----	674	656	26	12	-	
New Mexico-----	71	68	3	-	-	
New York-----	1,587	1,317	170	56	44	
North Carolina-----	320	302	12	3	2	
North Dakota-----	72	70	2	-	-	
Ohio-----	927	847	45	15	19	
Oklahoma-----	245	232	11	2	-	
Oregon-----	265	246	16	3	-	
Pennsylvania-----	1,133	1,066	48	9	10	
Rhode Island-----	132	117	16	-	-	
South Carolina-----	155	146	7	1	1	
South Dakota-----	94	86	6	1	1	
Tennessee-----	292	265	17	7	2	
Texas-----	740	666	45	21	9	
Utah-----	74	64	5	4	2	
Vermont-----	38	38	-	-	-	
Virginia-----	272	243	22	6	1	
Washington-----	356	334	19	2	1	
West Virginia-----	147	140	6	-	1	
Wisconsin-----	428	381	38	6	2	
Wyoming-----	41	41	-	-	-	

Table 25. Number and percent distribution of optometrists by number of optical technicians (shopmen) they used to assist in practice, according to State: United States, 1968--Con.

State	Total optometrists	Number of optical technicians (shopmen)			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	91.9	5.4	1.4	1.3
Alabama-----	100.0	91.8	5.0	0.6	2.5
Alaska-----	100.0	93.8	6.3	-	-
Arizona-----	100.0	93.0	5.2	1.7	-
Arkansas-----	100.0	94.9	3.7	1.5	-
California-----	100.0	94.0	3.9	0.9	1.2
Colorado-----	100.0	90.1	8.1	1.7	-
Connecticut-----	100.0	91.2	8.0	-	0.8
Delaware-----	100.0	96.7	3.3	-	-
District of Columbia-----	100.0	76.3	15.3	6.8	1.7
Florida-----	100.0	92.7	6.5	0.7	0.2
Georgia-----	100.0	90.0	8.4	1.6	-
Hawaii-----	100.0	100.0	-	-	-
Idaho-----	100.0	98.7	-	-	1.3
Illinois-----	100.0	92.0	4.2	1.4	2.4
Indiana-----	100.0	90.6	5.8	1.3	2.4
Iowa-----	100.0	95.2	3.2	-	1.6
Kansas-----	100.0	98.6	-	0.9	0.5
Kentucky-----	100.0	93.0	4.2	2.8	-
Louisiana-----	100.0	90.4	3.0	1.0	5.6
Maine-----	100.0	96.3	2.8	0.9	-
Maryland-----	100.0	82.5	8.1	1.9	7.5
Massachusetts-----	100.0	96.5	2.9	0.2	0.5
Michigan-----	100.0	91.2	6.4	0.5	2.0
Minnesota-----	100.0	95.8	3.3	0.3	0.6
Mississippi-----	100.0	100.0	-	-	-
Missouri-----	100.0	90.5	5.3	2.0	2.3
Montana-----	100.0	96.3	3.7	-	-
Nebraska-----	100.0	95.2	4.8	-	-
Nevada-----	100.0	90.9	9.1	-	-
New Hampshire-----	100.0	95.5	-	3.0	1.5
New Jersey-----	100.0	94.4	3.8	1.8	-
New Mexico-----	100.0	95.7	4.4	-	-
New York-----	100.0	83.0	10.7	3.5	2.8
North Carolina-----	100.0	94.6	3.7	1.0	0.7
North Dakota-----	100.0	96.8	3.2	-	-
Ohio-----	100.0	91.5	4.9	1.6	2.1
Oklahoma-----	100.0	94.8	4.4	0.9	-
Oregon-----	100.0	92.8	6.0	1.2	-
Pennsylvania-----	100.0	94.1	4.3	0.8	0.9
Rhode Island-----	100.0	88.2	11.8	-	-
South Carolina-----	100.0	93.8	4.8	0.7	0.7
South Dakota-----	100.0	90.9	6.8	1.1	1.1
Tennessee-----	100.0	90.9	5.8	2.6	0.7
Texas-----	100.0	90.0	6.0	2.8	1.2
Utah-----	100.0	85.7	6.4	4.8	3.2
Vermont-----	100.0	100.0	-	-	-
Virginia-----	100.0	89.5	8.1	2.0	0.4
Washington-----	100.0	93.6	5.5	0.6	0.3
West Virginia-----	100.0	95.0	4.3	-	0.7
Wisconsin-----	100.0	89.1	8.8	1.5	0.5
Wyoming-----	100.0	100.0	-	-	-

Table 26. Number and percent distribution of optometrists by number of optical technicians (shopmen) they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968

Geographic area and selected characteristics of optometrists	Total optometrists	Number of optical technicians (shopmen)			
		None	1	2	3 or more
Number					
United States-----	18,299	16,825	981	249	245
<u>Geographic region</u>					
Northeast-----	4,721	4,275	304	81	61
North Central-----	5,838	5,381	286	66	105
South-----	4,107	3,760	231	68	48
West-----	3,633	3,409	160	34	30
<u>Geographic division</u>					
New England-----	1,327	1,256	60	4	6
Middle Atlantic-----	3,394	3,019	244	77	55
East North Central-----	4,168	3,805	225	53	86
West North Central-----	1,670	1,577	61	13	19
South Atlantic-----	1,929	1,756	128	25	21
East South Central-----	820	763	36	15	7
West South Central-----	1,358	1,242	68	27	21
Mountain-----	709	661	36	9	3
Pacific-----	2,924	2,748	124	25	27
<u>Standard Federal Administrative Region</u>					
Region I-----	1,327	1,256	60	4	6
Region II-----	2,261	1,953	195	68	44
Region III-----	1,834	1,682	103	23	27
Region IV-----	2,049	1,903	109	27	11
Region V-----	4,521	4,143	236	54	88
Region VI-----	1,429	1,310	71	27	21
Region VII-----	1,151	1,083	41	11	16
Region VIII-----	556	513	32	8	3
Region IX-----	2,448	2,303	97	22	26
Region X-----	725	681	36	5	2
<u>Age of optometrist</u>					
Under 25 years-----	62	55	5	1	1
25-34 years-----	2,004	1,831	93	43	37
35-44 years-----	5,400	4,997	284	60	59
45-54 years-----	6,632	6,106	354	88	84
55-64 years-----	2,601	2,375	158	37	30
65-74 years-----	1,205	1,090	71	15	28
75 years and over-----	396	370	15	4	5
<u>Sex of optometrist</u>					
Male-----	17,912	16,463	964	248	237
Female-----	387	362	16	1	8
<u>Number of States licensed in</u>					
No States-----	20	19	-	-	1
1 State-----	13,920	12,828	724	180	188
2 States-----	3,355	3,071	199	44	41
3 States or more-----	1,005	908	58	25	14
<u>Hours per week usually worked</u>					
1-34 hours-----	2,153	2,048	76	10	19
35-39 hours-----	2,897	2,738	104	27	28
40 hours-----	4,218	3,849	232	73	64
41-44 hours-----	2,330	2,098	151	45	36
45-48 hours-----	3,431	3,127	202	44	59
49 hours or more-----	3,269	2,966	215	49	40

Table 26. Number and percent distribution of optometrists by number of optical technicians (shopmen) they used to assist in practice, according to geographic area and selected characteristics of the optometrist: United States, 1968—Con.

Geographic area and selected characteristics of optometrist	Total optometrists	Number of optical technicians (shopmen)			
		None	1	2	3 or more
Percent distribution					
United States-----	100.0	91.9	5.4	1.4	1.3
<u>Geographic region</u>					
Northeast-----	100.0	90.6	6.4	1.7	1.3
North Central-----	100.0	92.2	4.9	1.1	1.8
South-----	100.0	91.6	5.6	1.7	1.2
West-----	100.0	93.8	4.4	0.9	0.8
<u>Geographic division</u>					
New England-----	100.0	94.7	4.5	0.3	0.5
Middle Atlantic-----	100.0	89.0	7.2	2.3	1.6
East North Central-----	100.0	91.3	5.4	1.3	2.1
West North Central-----	100.0	94.4	3.7	0.8	1.2
South Atlantic-----	100.0	91.0	6.6	1.3	1.1
East South Central-----	100.0	93.0	4.4	1.8	0.8
West South Central-----	100.0	91.5	5.0	2.0	1.6
Mountain-----	100.0	93.2	5.1	1.3	0.5
Pacific-----	100.0	94.0	4.2	0.9	0.9
<u>Standard Federal Administrative Region</u>					
Region I-----	100.0	94.7	4.5	0.3	0.5
Region II-----	100.0	86.4	8.6	3.0	2.0
Region III-----	100.0	91.7	5.6	1.2	1.5
Region IV-----	100.0	92.9	5.3	1.3	0.5
Region V-----	100.0	91.6	5.2	1.2	1.9
Region VI-----	100.0	91.7	5.0	1.9	1.5
Region VII-----	100.0	94.1	3.6	0.9	1.4
Region VIII-----	100.0	92.3	5.7	1.4	0.6
Region IX-----	100.0	94.1	4.0	0.9	1.1
Region X-----	100.0	93.9	5.0	0.7	0.3
<u>Age of optometrist</u>					
Under 25 years-----	100.0	87.7	8.8	1.8	1.8
25-34 years-----	100.0	91.4	4.6	2.1	1.9
35-44 years-----	100.0	92.5	5.3	1.1	1.1
45-54 years-----	100.0	92.1	5.3	1.3	1.3
55-64 years-----	100.0	91.3	6.1	1.4	1.2
65-74 years-----	100.0	90.5	5.9	1.3	2.3
75 years and over-----	100.0	93.7	3.9	1.1	1.4
<u>Sex of optometrist</u>					
Male-----	100.0	91.9	5.4	1.4	1.3
Female-----	100.0	93.5	4.2	0.3	2.0
<u>Number of States licensed in</u>					
No States-----	100.0	94.2	-	-	5.8
1 State-----	100.0	92.2	5.2	1.3	1.4
2 States-----	100.0	91.5	5.9	1.3	1.2
3 States or more-----	100.0	90.4	5.7	2.5	1.4
<u>Hours per week usually worked</u>					
1-34 hours-----	100.0	95.1	3.6	0.5	0.9
35-39 hours-----	100.0	94.5	3.6	1.0	1.0
40 hours-----	100.0	91.3	5.5	1.7	1.5
41-44 hours-----	100.0	90.0	6.5	2.0	1.5
45-48 hours-----	100.0	91.1	5.9	1.3	1.7
49 hours or more-----	100.0	90.7	6.6	1.5	1.2

Table 27. Number and percent distribution of optometrists by number of optical technicians (shopmen) they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968

Selected professional characteristics of the optometrist	Total optometrists	Number of optical technicians (shopmen)			
		None	1	2	3 or more
United States-----	18,299	16,825	981	249	245
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	13,510	12,945	477	53	35
Partnership-----	2,178	1,832	222	71	52
Group practice-----	530	397	60	33	40
Employed by:					
Optometrists-----	951	738	114	51	48
Ophthalmologists or other physicians-----	171	144	15	3	9
Profit-making firms-----	636	489	73	27	47
Nonprofit organizations (including government)-----	183	157	11	6	10
Other-----	140	122	9	4	4
<u>Number of office locations</u>					
1 office-----	15,083	13,936	807	181	158
2 offices-----	2,806	2,549	147	61	50
3 offices or more-----	410	341	26	6	37
<u>Number of patient visits per week</u>					
Less than 25 visits-----	1,578	1,526	39	4	9
25-49 visits-----	3,762	3,622	98	21	21
50-74 visits-----	4,989	4,668	225	45	51
75-99 visits-----	2,750	2,511	162	40	37
100 visits or more-----	5,221	4,498	457	139	128
<u>Number of patients seen per week</u>					
Less than 25 patients-----	4,086	3,967	87	10	22
25-49 patients-----	6,886	6,446	330	62	49
50-74 patients-----	3,719	3,337	265	65	52
75-99 patients-----	1,726	1,519	119	40	49
100 patients or more-----	1,881	1,557	180	72	73
<u>Number of supplementary helpers of all types</u>					
None-----	3,960	3,960	-	-	-
1 assistant-----	6,655	6,606	49	-	-
2 assistants-----	3,883	3,602	277	3	-
3 assistants or more-----	3,801	2,656	654	245	245
<u>Number of optometric services rendered</u>					
1-3 services-----	900	821	37	15	27
4-6 services-----	4,075	3,705	227	63	80
7-9 services-----	7,344	6,786	373	98	87
10 services or more-----	5,980	5,513	343	74	50
<u>Type of optometric service</u>					
Refractions-----	18,238	16,774	975	248	242
Visual field examination-----	13,780	12,769	711	166	135
Tonometry-----	12,098	11,180	633	161	124
Aniseikonic testing-----	1,528	1,420	71	20	17
Biomicroscopy-----	5,907	5,391	370	79	67
Ophthalmoscopy-----	16,928	15,562	918	232	216
Contact lens fitting-----	14,521	13,371	780	191	178
Visual training (orthoptics)-----	9,128	8,558	408	88	74
Developmental vision-----	5,225	4,899	234	56	36
Prescribing low vision aids-----	7,450	6,895	393	94	68
Visual readiness for reading-----	4,735	4,438	216	39	42
Dispensing and adjusting eyewear-----	17,122	15,749	925	238	211
Frame repairs-----	15,532	14,299	852	209	172
Fabrication of eyewear-----	6,610	5,709	626	148	127
Other-----	718	653	43	16	7

Table 27. Number and percent distribution of optometrists by number of optical technicians (shopmen) they used to assist in practice, according to selected professional characteristics of the optometrist: United States, 1968—Con.

Selected professional characteristics of the optometrist	Total optometrists	Number of optical technicians (shopmen)			
		None	1	2	3 or more
United States-----	100.0	91.9	5.4	1.4	1.3
<u>Principal form of employment</u>					
Self employed:					
Solo practice-----	100.0	95.8	3.5	0.4	0.3
Partnership-----	100.0	84.2	10.2	3.3	2.4
Group practice-----	100.0	74.9	11.4	6.2	7.5
Employed by:					
Optometrists-----	100.0	77.6	12.0	5.4	5.1
Ophthalmologists or other physicians-----	100.0	84.1	8.9	1.9	5.1
Profit-making firms-----	100.0	76.9	11.5	4.3	7.4
Nonprofit organizations (including government)-----	100.0	85.6	6.1	3.0	5.3
Other-----	100.0	87.4	6.3	3.1	3.2
<u>Number of office locations</u>					
1 office-----	100.0	92.4	5.4	1.2	1.1
2 offices-----	100.0	90.8	5.2	2.2	1.8
3 offices or more-----	100.0	83.1	6.4	1.6	8.9
<u>Number of patient visits per week</u>					
Less than 25 visits-----	100.0	96.7	2.5	0.3	0.6
25-49 visits-----	100.0	96.3	2.6	0.6	0.6
50-74 visits-----	100.0	93.6	4.5	0.9	1.0
75-99 visits-----	100.0	91.3	5.9	1.5	1.3
100 visits or more-----	100.0	86.2	8.8	2.7	2.5
<u>Number of patients seen per week</u>					
Less than 25 patients-----	100.0	97.1	2.1	0.2	0.5
25-49 patients-----	100.0	93.6	4.8	0.9	0.7
50-74 patients-----	100.0	89.7	7.1	1.8	1.4
75-99 patients-----	100.0	88.0	6.9	2.3	2.8
100 patients or more-----	100.0	82.7	9.6	3.8	3.9
<u>Number of supplementary helpers of all types</u>					
None-----	100.0	100.0	-	-	-
1 assistant-----	100.0	99.3	0.7	-	-
2 assistants-----	100.0	92.8	7.2	0.1	-
3 assistants or more-----	100.0	69.9	17.2	6.5	6.4
<u>Number of optometric services rendered</u>					
1-3 services-----	100.0	91.3	4.2	1.6	3.0
4-6 services-----	100.0	90.9	5.6	1.5	2.0
7-9 services-----	100.0	92.4	5.1	2.3	1.2
10 services or more-----	100.0	92.2	5.7	1.2	0.8
<u>Type of optometric service</u>					
Refractions-----	100.0	92.0	5.4	1.4	1.3
Visual field examination-----	100.0	92.7	5.2	1.2	1.0
Tonometry-----	100.0	92.4	5.2	1.3	1.0
Aniseikonic testing-----	100.0	92.9	4.7	1.3	1.1
Biomicroscopy-----	100.0	91.3	6.3	1.4	1.1
Ophthalmoscopy-----	100.0	91.9	5.4	1.4	1.3
Contact lens fitting-----	100.0	92.1	5.4	1.3	1.2
Visual training (orthoptics)-----	100.0	93.8	4.5	1.0	0.8
Developmental vision-----	100.0	93.8	4.5	1.1	0.7
Prescribing low vision aids-----	100.0	92.6	5.3	1.3	0.9
Visual readiness for reading-----	100.0	93.7	4.6	0.8	0.9
Dispensing and adjusting eyewear-----	100.0	92.0	5.4	1.4	1.2
Frame repairs-----	100.0	92.1	5.5	1.3	1.1
Fabrication of eyewear-----	100.0	86.4	9.5	2.2	1.9
Other-----	100.0	90.9	5.9	2.3	0.9

APPENDIX I

TECHNICAL NOTES

Background of Report

The data presented in this report were collected as part of the 1968-69 Vision and Eye Care Manpower Survey. The survey, conducted by the U.S. Bureau of the Census under contract to the then Division of Health Resources Statistics, National Center for Health Statistics (NCHS), was designed to obtain information about the demographic and professional characteristics of optometrists engaged in providing direct health care to the public.

Survey Coverage

The total number of optometrists for purposes of this survey was defined as all legally registered persons licensed to practice optometry in any of the 50 States and the District of Columbia. The most complete and readily available list of these persons was *The Blue Book of Optometrists*,¹ which provided the names and addresses of licensed optometrists in each State and the District of Columbia. This list of 20,565 names and addresses became the original mailing list for the survey.

A pretest of the questionnaire used for the optometrists' survey was conducted during the period May-July 1968. Questionnaires were mailed to two optometrists in each State and the District of Columbia. After an initial mailout, one mail followup, and a telephone followup a response rate of 91 percent was achieved. The questionnaire proved to be an effective instrument. Only minor alterations were required for the final questionnaire. (See appendix III for a copy of the final questionnaire.)

Data Collection and Processing

The collection of data for the 1968 Manpower Survey was accomplished under contract with the U.S. Bureau of the Census. This agency was responsible for mailing the questionnaires, receipt and control procedures, coding the completed questionnaires in accordance with specifications established by NCHS, and for followup

whenever incomplete or inadequate questionnaires were returned or whenever a questionnaire was not returned.

For the actual survey, three mailouts were employed in an attempt to elicit a response, the first two by first-class mail, the last by certified mail. All three mailings were made in every case in which a return was not received.

Telephone contacts and personal interviews were also used. They were employed in cases of nonresponse or refusal as well as in cases of questionnaires that had been only partially completed.

A preliminary edit of the data was undertaken at the time of the return of the survey questionnaires. This was done to insure completeness of the responses. The data from the questionnaires were coded, punched on cards, transferred to computer tape, and sent to NCHS for processing. Processing included an elaborate series of checks and cross-checks to confirm the accuracy of responses, to correct coding and punching errors that occurred, and also to insure consistency between related items.

Response to the Survey

A total of 20,565 optometrists were provided by the original mailing list for the survey; 262 duplicate names and military personnel were eliminated. Military personnel were eliminated because some were inaccessible. The data provided in this report are for civilian optometrists in the 50 States and the District of Columbia. This amounted to 20,303 optometrists, or 98.7 percent of the original list.

A total of 18,533, or 91.2 percent of the 20,303, responded to the survey with usable questionnaires. The remainder was composed of 699 nonrespondents (i.e., reasons unknown); 533 postmaster returns (i.e., unable to locate); 308 deceased; and 230 refusals.

Of these 18,533 usable questionnaires (good responses), 16,835, or 90.8 percent, were active optometrists, while 1,698 reported that they were either retired or not currently engaged in optometrical activities although not retired (table I). There is evidence to indicate that the responses from active optometrists were better than those from inactive optometrists.

¹ *The Blue Book of Optometrists: 1968*. Chicago: Professional Press Inc., 1968).

Table I. Number and percent distribution of respondents to the questionnaire by question number and content, according to activity status: United States, 1968

Question number and content	All active respondents	Inactive respondents, retired and not retired
Number		
All respondents-----	16,835	1,698
Percent distribution		
Total-----	100.0	100.0
2. In what year were you born?-----	99.6	82.5
5. Sex?-----	97.9	81.1
6a. From which school of optometry did you graduate?-----	99.1	78.1
6b. When did you graduate?-----	98.7	75.6
7. What degrees have you earned?-----	97.5	72.4
8. In which States do you currently hold an active license to practice optometry?-----	98.6	74.1
9. Are you currently active in optometry?-----	100.0	100.0
10. Which categories best describe your principal form of employment?-----	99.6	...
11. How many weeks per year do you usually practice optometry?-----	99.0	...
12. How many hours per week do you usually practice optometry?-----	99.0	...
13a. Approximately what percent of the hours per week do you usually spend in optometric practice?-----	98.8	...
16a. In your optometric practice, approximately how many patient visits for all purposes do you have during a typical week?-----	92.0	...
16b. Approximately how many patients does this represent?-----	88.4	...
18. In your optometric practice do you have supplementary personnel to assist you?-----	98.4	...

Item Response

A response to the survey does not necessarily insure adequate answers to all of the questions on the questionnaire. In fact, a response to a single question is considered a response to the survey. This section will be concerned with the nonresponses to individual questions on the questionnaire, i.e., item nonresponse. The previous section discussed nonresponses to the survey as a whole, i.e., unit nonresponses. This discussion will involve only the 18,533 good unit responses because interest here concerns the variability of responses to different questions. Table I presents the distribution of responses to selected questions on the questionnaire. Selection of the questions was based on their relevance to this report.

One can hardly avoid noticing the differences in the percentages of responses to the individual questions between the active and inactive respondents. At least 17 percent more active respondents answered every question (among those asked of both active and inactive optometrists) than did inactive respondents. Based on this finding, it is not unrealistic to suspect that a similar situation prevailed in terms of responses to the question-

naire generally. A larger share of the unit nonresponses were probably attributable to inactive persons than to those who were active.

Imputation for Unknowns

As a matter of policy, tables in this publication are presented with item nonresponses imputed. The allocation of the item nonresponses was done by computer, utilizing two principles: first, random assignment; and second, utilization of related information as category controls to insure consistency among different related items within the same record.

Assignment of values to replace item nonresponse is done on a random basis to prevent bias. The value used to replace an item nonresponse is randomly selected from within a range of values prescribed by related information from the record containing the item nonresponse. Establishment of a range of values is necessary to insure that the value used to replace the item nonresponse will not be inconsistent with other values within the record in which the value is being placed.

An example may clarify the procedures. Mr. Blank is 48 years of age. His year at graduation is not known. It must be imputed. Age and year at graduation are related items. In this case, Mr. Blank's age will be used as a category control to choose an appropriate record from which a year at graduation will be selected. By means of a random selection process, Mr. Given's record is chosen because his age was 49. The age category in this case could have been 48-50. Thus Mr. Blank's and Mr. Given's ages were both in the same category. Mr. Given's year at graduation was listed as 1942. The year 1942 is then copied into Mr. Blank's record as his year at graduation and will be counted in all tabulations as if it were the actual year Mr. Blank had provided on his questionnaire.

State and National Estimates

The statistics presented in this report were inflated to allow for unit nonresponses, i.e., for entire question-

naires that were not available. This "inflation" factor was the ratio of total optometrists to the number of usable (good) responses obtained. Within each State the number of optometrists was divided by the number of good responses to obtain the increment needed to adjust the statistics for the nonresponses. The increment multiplied by the number of respondents provided the inflated number of civilian optometrists (20,301). Table II presents the number of respondents to the optometry manpower survey, the ratio weights, and the inflated numbers of active optometrists for each State.

Rounding

Numbers that appear in the present report were independently rounded and may not add to totals. Percents were also independently rounded and may not always add to 100 percent. Percents and rates were calculated on the basis of original, unrounded figures and will not necessarily agree with rates and percents which might be calculated from rounded data.

Table II. Number of optometrists by activity status, before and after inflation: United States and each State, 1968

State	Optometrist		Inflation factors	Inflated active optometrists	Inflated inactive optometrists	Inflated total
	Active	Inactive				
United States-----	16,835	1,698	1.10	18,427	1,873	20,301
Alabama-----	159	11	1.13	180	12	192
Alaska-----	16	1	1.06	17	1	18
Arizona-----	115	3	1.10	127	3	130
Arkansas-----	136	3	1.11	151	3	154
California-----	2,077	231	1.08	2,242	249	2,492
Colorado-----	174	10	1.08	188	11	199
Connecticut-----	252	7	1.03	260	7	267
Delaware-----	30	3	1.18	35	4	39
District of Columbia-----	59	12	1.21	71	15	86
Florida-----	465	38	1.06	493	40	533
Georgia-----	250	15	1.05	263	16	278
Hawaii-----	61	4	1.05	64	4	68
Idaho-----	77	5	1.12	86	6	92
Illinois-----	1,393	262	1.16	1,616	304	1,920
Indiana-----	472	27	1.08	510	29	539
Iowa-----	311	22	1.08	336	24	360
Kansas-----	216	20	1.06	229	21	250
Kentucky-----	214	8	1.07	229	9	238
Louisiana-----	199	15	1.12	223	17	240
Maine-----	109	9	1.06	116	10	125
Maryland-----	160	17	1.09	175	19	194
Massachusetts-----	660	87	1.09	719	95	814
Michigan-----	656	59	1.08	708	64	772
Minnesota-----	331	43	1.07	354	46	400
Mississippi-----	115	8	1.05	121	8	129
Missouri-----	400	45	1.08	432	49	481
Montana-----	82	6	1.08	89	6	95
Nebraska-----	146	16	1.06	155	17	172
Nevada-----	33	2	1.09	36	2	38
New Hampshire-----	66	1	1.06	70	1	71
New Jersey-----	608	27	1.11	675	30	705
New Mexico-----	69	2	1.03	71	2	73
New York-----	1,402	178	1.14	1,598	203	1,801
North Carolina-----	298	19	1.08	322	21	342
North Dakota-----	63	4	1.15	72	5	77
Ohio-----	880	86	1.07	942	92	1,034
Oklahoma-----	231	12	1.07	247	13	260
Oregon-----	258	27	1.06	273	29	302
Pennsylvania-----	1,022	150	1.12	1,145	168	1,313
Rhode Island-----	119	10	1.11	132	11	143
South Carolina-----	145	6	1.07	155	6	162
South Dakota-----	88	7	1.07	94	7	102
Tennessee-----	279	27	1.06	296	29	324
Texas-----	690	62	1.09	752	68	820
Utah-----	63	10	1.18	74	12	86
Vermont-----	35	1	1.08	38	1	39
Virginia-----	249	9	1.10	274	10	284
Washington-----	330	37	1.08	356	40	396
West Virginia-----	139	10	1.06	147	11	158
Wisconsin-----	397	22	1.08	429	24	453
Wyoming-----	36	2	1.13	41	2	43

APPENDIX II

DEFINITIONS

Age.—Age refers to the respondent's age in 1970. In all cases, age is calculated as the difference between 1970 and the respondent's year of birth.

Geographic area.—For the purpose of reporting the data yielded by the 1970 Podiatry Survey, the United States (the 50 States and the District of Columbia) is divided into the geographic regions and divisions used by the U.S. Bureau of the Census and into the ten Standard Federal Administrative Regions as follows:

<i>Geographic region and division</i>	<i>States included</i>
Northeast	
New England-----	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
Middle Atlantic-----	New York, New Jersey, Pennsylvania
North Central	
East North Central-----	Ohio, Indiana, Illinois, Michigan, Wisconsin
West North Central-----	Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas
South	
South Atlantic-----	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
East South Central-----	Kentucky, Tennessee, Alabama, Mississippi
West South Central-----	Arkansas, Louisiana, Oklahoma, Texas
West	
Mountain-----	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
Pacific-----	Washington, Oregon, Alaska, California, Hawaii

Standard Federal Administration Region with headquarters city

States included

Region I (Boston)-----	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Region II (New York)-----	New York, New Jersey
Region III (Philadelphia)---	District of Columbia, Delaware, Maryland, Pennsylvania, Virginia, West Virginia
Region IV (Atlanta)-----	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
Region V (Chicago)-----	Illinois, Indiana, Minnesota, Michigan, Ohio, Wisconsin
Region VI (Dallas-Fort Worth)-----	Arkansas, Louisiana, New Mexico, Oklahoma, Texas
Region VII (Kansas City)---	Iowa, Kansas, Missouri, Nebraska
Region VIII (Denver)-----	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
Region IX (San Francisco)---	Arizona, California, Hawaii, Nevada
Region X (Seattle)-----	Alaska, Idaho, Oregon, Washington

APPENDIX III SURVEY QUESTIONNAIRE

PHS-T407-3
REV. 8-68

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. PUBLIC HEALTH SERVICE

Form Approved
Budget Bureau No. 68-568020

CONFIDENTIAL: All information which permits the identification of the individual will be held strictly confidential, will be used solely by persons engaged in, and only for the purposes of the survey and will not be disclosed or released to other persons or for any other purpose.

SURVEY OF OPTOMETRISTS

1. Is your name correct, and is the address above your PRIMARY PLACE OF PRACTICE?

1 ☐ Yes 2 ☐ No

If no, please enter the correct information below:

Name: First Middle Last
Primary place of practice: Number Street
City State Zip Code

2. In what year were you born? (Year)

3. Where were you born? (State or foreign country)

4. Are you a citizen of the United States? (Please check appropriate box)

1 ☐ Yes, Native Born
2 ☐ Yes, Naturalized
3 ☐ No

5. Sex: 1 ☐ Male
2 ☐ Female

6. A. From which school of optometry did you graduate?

Name of School
City State or Country

B. When did you graduate? (Year graduated)

PAGE 1

7. What degrees have you earned? (Check all that apply)

- ☐ 1 Doctor of Optometry
- ☐ 2 Doctorate (Specify major field _____)
- ☐ 3 Master's (Specify major field _____)
- ☐ 4 Bachelor's (Specify major field _____)
- ☐ 5 Other (Specify _____)

8. In which States do you currently hold an ACTIVE LICENSE to practice optometry?

9. Are you CURRENTLY ACTIVE in optometry? (Include patient care, teaching, research, and administration)

- ☐ 1 Yes, Full-time
- ☐ 2 Yes, Part-time

PROCEED to
Question 10.

- ☐ 3 No, Not active in optometry
- ☐ 4 No, Retired

STOP!
Remainder of questionnaire does not apply. Please
return questionnaire in the envelope provided.

10. Which of the following categories best describes your PRINCIPAL form of employment? (Check one)

- ☐ 01 Self-employed - Solo practice
- ☐ 02 Self-employed - Partnership practice
- ☐ 03 Self-employed - Group practice
- ☐ 04 Employed by - Military
- ☐ 05 Employed by - Government (non-military)
- ☒ 06 Employed by - Optometrist(s)
- ☐ 07 Employed by - Ophthalmologist(s)
- ☐ 08 Employed by - Physician(s) other than ophthalmologist(s)
- ☐ 09 Employed by - Firm or corporation (profit-making)
- ☐ 10 Employed by - Nonprofit organization or institution
- ☐ 11 Other (Specify _____)

If in partnership or group practice, how many
OPTOMETRISTS are there in the partnership
or group COUNTING "YOURSELF"?

Number _____

11. How many WEEKS per year do you usually practice optometry? (Include patient care, teaching, research, and administration. Do not count vacations as weeks worked.)

(Weeks per year) _____

12. How many HOURS per week do you usually practice optometry? (Include patient care, teaching, research, and administration)

(Hours per week) _____

13. APPROXIMATELY what PERCENT of the hours per week, indicated in Item 12 above, do you usually spend in each of the following activities?

- a. _____ % Optometric practice
 b. _____ % Teaching in a school of optometry
 c. _____ % Optometric research
 d. _____ % Administration (Optometric Association, etc.)
 e. _____ % Other (Specify: _____)
 100 % TOTAL

If 0% of your time is spent in OPTOMETRIC PRACTICE, (Item 13 a. above) STOP, and return questionnaire in the envelope provided; otherwise continue.

14. In your OPTOMETRIC PRACTICE, which of the services below are rendered to your patients by you or under your direction? (Check all that apply)

- 01 ☐ Refractions
 02 ☐ Visual fields
 03 ☐ Tonometry
 04 ☐ Aniseikonic testing
 05 ☐ Biomicroscopy
 06 ☐ Ophthalmoscopy
 07 ☐ Contact lens fitting
 08 ☐ Visual training/orthoptics
 09 ☐ Developmental vision
 10 ☐ Prescribing low vision aids
 11 ☐ Visual readiness for reading
 12 ☐ Dispensing and adjusting
 13 ☐ Frame repairs
 14 ☐ Fabrication of eyewear
 15 ☐ Other (Specify: _____)

15. In your OPTOMETRIC PRACTICE, what do you consider to be your PRIMARY, and your SECONDARY, activity?

A. PRIMARY activity: (Check one)

- 1 ☐ General practice
 2 ☐ Contact lens fitting
 3 ☐ Visual training/orthoptics
 4 ☐ Developmental vision
 5 ☐ Prescribing low vision aids
 6 ☐ Industrial vision
 7 ☐ Other (Specify: _____)

B. SECONDARY activity: (Check one)

- 1 ☐ General practice
 2 ☐ Contact lens fitting
 3 ☐ Visual training/orthoptics
 4 ☐ Developmental vision
 5 ☐ Prescribing low vision aids
 6 ☐ Industrial vision
 7 ☐ Other (Specify: _____)
 8 ☐ None

16. A. In your **OPTOMETRIC PRACTICE, APPROXIMATELY** how many patient **VISITS** for all purposes do you have during a typical week?

(Approximate number of visits)

- B. **APPROXIMATELY** how many **PATIENTS** does this represent? (Patients with multiple visits should be counted only once)

(Approximate number of patients)

17. What is the total number of office locations at which you currently practice optometry?

(Number of locations)

18. In your **PRINCIPAL FORM OF EMPLOYMENT**, indicated in Item 10 above, do you have supplementary personnel to assist you?

1 ☐ Yes 2 ☐ No

Please indicate the **NUMBER** in each category below for **ALL** offices combined which are related to your principal form of employment.

(Persons who spend less than 75% of their time in any one category below should be counted in category b, general optometric assistant)

	NUMBER WHO WORK FULL-TIME (35 hours or more per week)		NUMBER WHO WORK PART-TIME (Less than 35 hours per week)	
	FOR YOU ALONE	FOR YOU AND ASSOCIATES	FOR YOU ALONE	FOR YOU AND ASSOCIATES
a. Secretaries, Receptionists	_____	_____	_____	_____
b. General optometric assistants	_____	_____	_____	_____
c. Optometric technicians	_____	_____	_____	_____
d. Dispensing opticians	_____	_____	_____	_____
e. Contact lens technicians	_____	_____	_____	_____
f. Optical technicians (Shopmen)	_____	_____	_____	_____
g. Other (Specify _____)	_____	_____	_____	_____

19. A. If you have made entries under **FOR YOU AND ASSOCIATES** in the full-time or part-time columns in Item 18 above how many associates, **COUNTING YOURSELF**, share these personnel?

(Number of associates)

- B. Of these associates, how many are **OPTOMETRISTS, COUNTING YOURSELF**?

(Number of optometrists)

COMMENTS - General comments are invited as well as comments on specific items:

PLEASE RETURN QUESTIONNAIRE IN THE STAMPED ENVELOPE PROVIDED.

VITAL AND HEALTH STATISTICS PUBLICATION SERIES

Originally Public Health Service Publication No. 1000

- Series 1. Programs and collection procedures.*—Reports which describe the general programs of the National Center for Health Statistics and its offices and divisions, data collection methods used, definitions, and other material necessary for understanding the data.
- Series 2. Data evaluation and methods research.*—Studies of new statistical methodology including: experimental tests of new survey methods, studies of vital statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, contributions to statistical theory.
- Series 3. Analytical studies.*—Reports presenting analytical or interpretive studies based on vital and health statistics, carrying the analysis further than the expository types of reports in the other series.
- Series 4. Documents and committee reports.*—Final reports of major committees concerned with vital and health statistics, and documents such as recommended model vital registration laws and revised birth and death certificates.
- Series 10. Data from the Health Interview Survey.*—Statistics on illness, accidental injuries, disability, use of hospital, medical, dental, and other services, and other health-related topics, based on data collected in a continuing national household interview survey.
- Series 11. Data from the Health Examination Survey.*—Data from direct examination, testing, and measurement of national samples of the civilian, noninstitutional population provide the basis for two types of reports: (1) estimates of the medically defined prevalence of specific diseases in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics; and (2) analysis of relationships among the various measurements without reference to an explicit finite universe of persons.
- Series 12. Data from the Institutional Population Surveys.*—Statistics relating to the health characteristics of persons in institutions, and their medical, nursing, and personal care received, based on national samples of establishments providing these services and samples of the residents or patients.
- Series 13. Data from the Hospital Discharge Survey.*—Statistics relating to all discharged patients in short-stay hospitals, based on a sample of patient records in a national sample of hospitals.
- Series 14. Data on health resources: manpower and facilities.*—Statistics on the numbers, geographic distribution, and characteristics of health resources including physicians, dentists, nurses, other health occupations, hospitals, nursing homes, and outpatient facilities.
- Series 15. Data on mortality.*—Various statistics on mortality other than as included in regular annual or quinquennial reports—special analyses by cause of death, age, and other demographic variables, also geographic and time series analyses.
- Series 16. Data on fertility, marriage, and divorce.*—Various statistics on marriage, marriage, and divorce other than as included in regular annual or quinquennial reports—special analyses by demographic variables, also geographic and time series analyses, studies of fertility.
- Series 17. Data from the National Health and Morbidity Survey.*—Statistics on characteristics and health and illness of individuals from the 1957 and 1962 surveys, based on sample surveys stemming from telephone screening, covering such topics as morbidity, mental health, hospital experience in the last year, health insurance, health insurance coverage, etc.

For a list of publications, see the following pages: 1000-1001, 1002-1003, 1004-1005, 1006-1007, 1008-1009, 1010-1011, 1012-1013, 1014-1015, 1016-1017, 1018-1019, 1020-1021, 1022-1023, 1024-1025, 1026-1027, 1028-1029, 1030-1031, 1032-1033, 1034-1035, 1036-1037, 1038-1039, 1040-1041, 1042-1043, 1044-1045, 1046-1047, 1048-1049, 1050-1051, 1052-1053, 1054-1055, 1056-1057, 1058-1059, 1060-1061, 1062-1063, 1064-1065, 1066-1067, 1068-1069, 1070-1071, 1072-1073, 1074-1075, 1076-1077, 1078-1079, 1080-1081, 1082-1083, 1084-1085, 1086-1087, 1088-1089, 1090-1091, 1092-1093, 1094-1095, 1096-1097, 1098-1099, 1100-1101, 1102-1103, 1104-1105, 1106-1107, 1108-1109, 1110-1111, 1112-1113, 1114-1115, 1116-1117, 1118-1119, 1120-1121, 1122-1123, 1124-1125, 1126-1127, 1128-1129, 1130-1131, 1132-1133, 1134-1135, 1136-1137, 1138-1139, 1140-1141, 1142-1143, 1144-1145, 1146-1147, 1148-1149, 1150-1151, 1152-1153, 1154-1155, 1156-1157, 1158-1159, 1160-1161, 1162-1163, 1164-1165, 1166-1167, 1168-1169, 1170-1171, 1172-1173, 1174-1175, 1176-1177, 1178-1179, 1180-1181, 1182-1183, 1184-1185, 1186-1187, 1188-1189, 1190-1191, 1192-1193, 1194-1195, 1196-1197, 1198-1199, 1200-1201, 1202-1203, 1204-1205, 1206-1207, 1208-1209, 1210-1211, 1212-1213, 1214-1215, 1216-1217, 1218-1219, 1220-1221, 1222-1223, 1224-1225, 1226-1227, 1228-1229, 1230-1231, 1232-1233, 1234-1235, 1236-1237, 1238-1239, 1240-1241, 1242-1243, 1244-1245, 1246-1247, 1248-1249, 1250-1251, 1252-1253, 1254-1255, 1256-1257, 1258-1259, 1260-1261, 1262-1263, 1264-1265, 1266-1267, 1268-1269, 1270-1271, 1272-1273, 1274-1275, 1276-1277, 1278-1279, 1280-1281, 1282-1283, 1284-1285, 1286-1287, 1288-1289, 1290-1291, 1292-1293, 1294-1295, 1296-1297, 1298-1299, 1300-1301, 1302-1303, 1304-1305, 1306-1307, 1308-1309, 1310-1311, 1312-1313, 1314-1315, 1316-1317, 1318-1319, 1320-1321, 1322-1323, 1324-1325, 1326-1327, 1328-1329, 1330-1331, 1332-1333, 1334-1335, 1336-1337, 1338-1339, 1340-1341, 1342-1343, 1344-1345, 1346-1347, 1348-1349, 1350-1351, 1352-1353, 1354-1355, 1356-1357, 1358-1359, 1360-1361, 1362-1363, 1364-1365, 1366-1367, 1368-1369, 1370-1371, 1372-1373, 1374-1375, 1376-1377, 1378-1379, 1380-1381, 1382-1383, 1384-1385, 1386-1387, 1388-1389, 1390-1391, 1392-1393, 1394-1395, 1396-1397, 1398-1399, 1400-1401, 1402-1403, 1404-1405, 1406-1407, 1408-1409, 1410-1411, 1412-1413, 1414-1415, 1416-1417, 1418-1419, 1420-1421, 1422-1423, 1424-1425, 1426-1427, 1428-1429, 1430-1431, 1432-1433, 1434-1435, 1436-1437, 1438-1439, 1440-1441, 1442-1443, 1444-1445, 1446-1447, 1448-1449, 1450-1451, 1452-1453, 1454-1455, 1456-1457, 1458-1459, 1460-1461, 1462-1463, 1464-1465, 1466-1467, 1468-1469, 1470-1471, 1472-1473, 1474-1475, 1476-1477, 1478-1479, 1480-1481, 1482-1483, 1484-1485, 1486-1487, 1488-1489, 1490-1491, 1492-1493, 1494-1495, 1496-1497, 1498-1499, 1500-1501, 1502-1503, 1504-1505, 1506-1507, 1508-1509, 1510-1511, 1512-1513, 1514-1515, 1516-1517, 1518-1519, 1520-1521, 1522-1523, 1524-1525, 1526-1527, 1528-1529, 1530-1531, 1532-1533, 1534-1535, 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